EXHIBIT B Consultant Work Scope/ Hourly Rates

3.0 Key Personnel and Project Management Program

This section of the proposal presents a summary of the key personnel who will work on the Project and provides an overview of the Project management program.

3.1 Key Personnel

MRS selected a specialized team for this assignment based on the project type, location, affected resources, and the key issues concerning the public. To complement MRS's expertise, team members from MRS will manage the work for this assignment from their Ventura office:

Marine Research Specialists 3140 Telegraph Road, Suite A Ventura, CA 93003 805.289.3920

All MRS staff members can be reached at this location.

Figure 3-1 is the organizational structure for managing this Project and identifies key team members and their areas of responsibility. Brief biographical sketches of the key team members highlight their relevant experience working on similar environmental review projects. More detailed resumes for the key staff are located in Appendix A.

Mr. John Peirson, MRS, will be the Project Manager for this assignment and will be responsible for monitoring technical progress on each task, reviewing and approving documents prior to submission to the County, monitoring financial and schedule control, assuring compliance with all aspects of the contract, instituting corrective action if necessary, and providing overall quality control. He will also act as an Issue Area Coordinator for the Project Description/Alternatives and Other Issue Areas. Mr. Peirson has over 28 years of expertise managing of large complex environmental review projects to comply with the requirements of CEQA and NEPA. His CEQA and NEPA work primarily focuses on large complex industrial projects. He has managed many EIR/EIS assessments, which include some of the most complex and controversial projects evaluated on the South and Central Coast of California.

He has also worked extensively in engineering, risk assessment, and environmental studies of various oil industry related project in California. His professional work emphasizes major environmental and energy assignments with state and local governments as well as industry.

Mr. John Peirson, a principal with MRS, has over 30 years experience in various aspects of refinery operations. Mr. Peirson has conducted environmental, health and safety audits at more than 10 different refineries including, the Wilmington and Carson Refineries in Los Angeles, the Richmond, Avon, Benicia, and Martinez Refineries in the Bay Area. In addition, Mr. Peirson

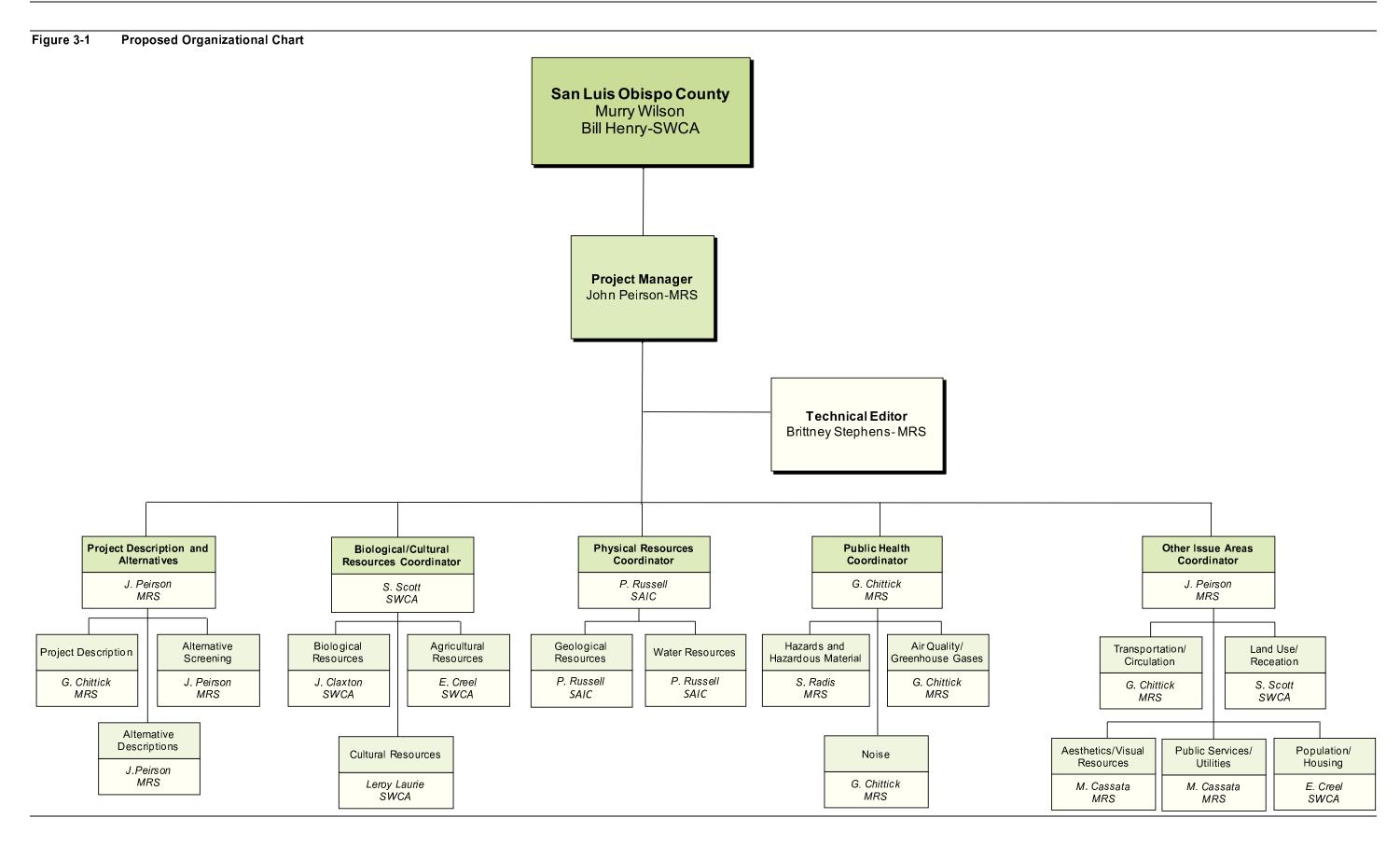
was the program manager for safety and corporate culture assessments at two refineries in Contra Costa County that were conducted on behalf of Contra Costa County Environmental Health.

Mr. Peirson also was the Project Manager of the Crude Oil Transportation Analysis (COTA), which was prepared for the County of Santa Barbara. This study looked a various transportation alternatives for crude oil include, pipeline, rail, and marine tanker. This study looked at both economic and environmental issues associated with the various modes of transportation. Mr. Peirson was also a principal investigator for Oil Transportation Plan, which was prepared for Santa Barbara County. This study was very similar to the COTA study, in that it looked at the environmental and economic issues associated with various crude transportation methods including rail. As part of this study, Mr. Peirson worked with the refineries on the West Coast to develop refinery modeling that was use to determine the what effect OCS crude would have on refinery operations.

Mr. Peirson began working on CEQA/NEPA permitting activities in 1983. Since then he has prepared CEQA/NEPA documents for more than 63 major projects within California. Most of these projects were controversial and involved considerable work in developing permitting strategy. All EIRs and/or EISs in which Mr. Peirson was manager have been upheld in court proceedings.

Mr. Peirson has provided over 750 hours of testimony to local and state decision makers including Planning Commissions, Boards of Supervisors, the State Lands Commission, and the California Coastal Commission. He also has extensive experience in working with local and state government staff in developing permit conditions and findings.

Mr. Greg Chittick, MRS, will be the Principal Investigator for the Project Description, Air Quality, Noise, and Transportation/Circulation. Mr. Chittick has more than 15 years experience in quantitative analysis of environmental impacts. He has conducted analysis of noise impacts, air quality impacts, and prepared computerized maps with geographical information systems related to a number of CEQA projects involving industrial projects. Mr. Chittick prepared the air quality section for the recent Phillips SMR Expansion Project, the Chevron Tank Farm Road Project, as well as all of the other EIRs MRS has prepared for San Luis Obispo County. Mr. Chittick also has conducted extensive noise modeling for a number of construction and transportation projects. Mr. Chittick has also prepared the transportation section of a number of EIR including the Excelaron EIR, SMR Expansion Project EIR, and the Paredon Project EIR.



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Page 5 of 79

Mr. Steve Radis, MRS, will serve as the Principal Investigator for Hazards and Hazardous Materials. His expertise includes oil spill release modeling, meteorological modeling and analysis, physical oceanographic modeling and analysis, consequence and risk analysis, fire and explosion dynamics, hazard evaluation, external events analysis, fault tree analysis, and model development. Mr. Radis has worked on a wide variety of studies for utilities, commercial, and government clients involving oil spill modeling, meteorological modeling, quantitative risk assessments, health risk assessments, consequence analysis, risk management, air quality modeling (inert/photochemical pollutants, toxic air contaminants), and EIRs and EIRs.

Mr. Michael Cassata, MRS, will serve as the Principal Investigator for Aesthetics and Public Services/ Utilities. Mr. Cassata has five years of experience and a planner and preparing EIRs for various types of development projects. He prepared the Aesthetics and Public Services/ Utilities sections of the Chevron Tank Farm EIR, the Whittier Project EIR, and assisted in these sections as part of the Baldwin Hills CSD EIR.

Jon Claxton, SWCA, will be the Principal Investigator for the Biological Resources section of the EIR. Mr. Claxton has 12 years of environmental consulting experience in California. As the Natural Resources Team Leader in the SWCA San Luis Obispo office, he oversees projects related to natural resources, providing management to eight in-house biologists and one archaeologist, and providing Quality Assurance and Quality Control (QA/QC) on various reports. Mr. Claxton's work has included management of environmental tasks for the County of San Luis Obispo Department of Public Works, and most notably, large on-call contracts with Caltrans Districts 5 and 10. Mr. Claxton has authored Caltrans NESs, CEOA/NEPA documents, biological constraints analysis, jurisdictional delineations, Endangered Species Act Section 7 Biological Assessments (BA), sensitive species survey reports, EIR sections, and mitigation and monitoring plans. Mr. Claxton also has proven experience with permitting in compliance with Clean Water Act Sections 401 and 404, Fish and Game Code Section 1602 Streambed Alteration Agreements, and the Coastal Act. Mr. Claxton is currently working on five bridge projects on the Central Coast. In addition to Mr. Claxton's contribution to the PXP Phase IV EIR, his recent projects include the Arroyo Grande Creek Waterway Management Plan EIR and the Brisco Road/Halcyon Road/Highway 101 Interchange project.

Emily Creel, J.D., SWCA, will prepare the Agricultural Resources, Population and Housing, and Land Use and Recreation sections of the EIR. Ms. Creel obtained her J.D. in 2005 and has been practicing in the field of environmental, property, municipal, and land use law in San Luis Obispo County for over six years. She has a specialized background in environmental and property law, and focused her J.D. studies on environmental law and policy, water law, land use controls, and public natural resources. As an Environmental Planner with SWCA for four years, Ms. Creel has prepared or participated in the preparation of a variety of CEQA and NEPA documents, including numerous EIRs, NDs, CEQA findings, mitigation monitoring and reporting plans, all required noticing documents, and a number of technical reports in support of

the NEPA process. Ms. Creel is well versed in state and federal environmental laws and regulations, legal research resources and interpretations, the formulation of case law precedence, the administrative process, and local county and municipal codes. Six years of legal practice have given Ms. Creel the ability to handle complex environmental and legal issues. Ms. Creel prepared sections of the Excelaron (Mankins) Conditional Use Permit Huasna Valley Oil Exploration and Production Project EIR, including Agricultural Resources, Land Use, Population and Housing, and Public Services and Utilities.

Leroy Laurie, SWCA, will prepare the Cultural Resources section of the EIR. Mr. Laurie is a cultural resources specialist at SWCA's San Luis Obispo, California office. While based out of the Central Coast in Morro Bay, he has accumulated nine years of cultural resource project experience throughout California and Nevada. He has conducted work in a variety of cultural and geographic regions including, but not limited to, the Sierra Nevada, Great Basin, San Joaquin Valley, Central and Coast Ranges, Mojave and Sonoran Deserts, San Francisco Bay area, and Yosemite Valley. In addition to the organization and execution of field projects, he has been the primary or contributing author to several planning level documents for large- and smallscale projects. During his past three years at SWCA, Mr. Laurie has worked on a variety of cultural resources studies. He has helped manage and implement several Phase I studies, and an Extended Phase I study. He has authored or co-authored numerous technical reports and cultural resources sections for EIRs, EAs, and ExISs. Mr. Laurie has technical experience in archaeological fieldwork, laboratory analyses, archaeological testing plans, and graphics and mapping. He has been the primary point of contact for Native American coordination for CEQA and Section 106 compliant projects. Mr. Laurie prepared the Cultural Resources section for the Excelaron (Mankins) Conditional Use Permit Huasna Valley Oil Exploration and Production Project EIR and Morro Bay to Cayucos Connector EIR.

Shawna Scott, SWCA, will serve as the Issue Area Coordinator for the Biological/Cultural Resources. Ms. Scott will be responsible for managing the day-to-day issues for the SWCA team members and will provide quality assurance/quality control for the SWCA deliverables. Ms. Scott specializes in implementing lead agency responsibilities under CEQA and NEPA, managing project teams, and writing environmental documents. Ms. Scott has over 13 years of experience in land use and environmental planning, and has prepared several types of documents including EIRs, MNDs, ExISs, preliminary environmental analysis reports, environmental constraints and opportunities analysis reports, Local Coastal Plan/Coastal Act policy analysis, staff reports, and findings. In addition, Ms. Scott's responsibilities include schedule and budget management, coordination with Lead Agency staff, consultation with Federal state, and local agencies, assistance with Lead Agency correspondence to applicants, agencies, and interested parties, facilitation and support during in-house and public meetings, response to comments, preparation of conditions and findings, and presentation at public hearings. Ms. Scott's extensive public and private project experience includes: general plan and ordinance amendments; urban and rural land development; restoration projects; recreational facilities; open space management;

wineries; energy generation and transmission; telecommunications, and fiber optic facilities and infrastructure; wastewater treatment, storage, and disposal; and, road and bridge improvements. Recent projects in the South County area include the Nipomo Community Park Master Plan Program EIR, Excelaron (Mankins) Conditional Use Permit Huasna Valley Oil Exploration and Production Project EIR, and Laetitia Agricultural Cluster EIR.

Mr. Perry Russell, SAIC, will be the Principal Investigator for Geological and Water Resources. Mr. Russell has 26 years experience as a geologist, including 17 years preparing technical sections for CEQA documents. Technical sections completed by Mr. Russell include geological resources, water resources, wastewater, hazardous materials, and safety, related to a number of oil and gas projects, including the Orcutt Oil Field Expansion Project, the Venoco Paredon Project, the Matrix Oil Whittier Main Oil Field Project, the PXP Inglewood Oil Field Expansion Project, the Venoco Line 96 Project, the Venoco Ellwood Marine Terminal Abandonment Project, the Tranquillon Ridge Offshore Drilling Project, and the Molino Gas Development Project. He also prepared sections for the Plains All American Pipeline, L.P., Pier 400, Berth 408 Project, in the Port of Los Angeles. Mr. Russell is a California Professional Geologist, California Certified Engineering Geologist, and has several years experience as a petroleum geologist. Mr. Russell has also completed projects in San Luis Obispo County, including an EIR associated with a proposed temporary storage facility for radioactive waste at the Diablo Canyon Nuclear Power Plant.

Joel Degner, EIT, QSP/QSD, CPSWQ- SAIC, Mr. Degner specializes in water resources planning and engineering and provides technical support for water resource projects in the Western States. In 2005, Mr. Degner began working on water resource issues in the Santa Maria Valley area related to the groundwater litigation. He assisted Nipomo Mesa Management Area (NMMA) Technical Group with data collection and preparation of the 1st and 2nd Annual Reports. Mr. Degner also peer-reviewed a previous water resource section for the Refinery Expansion EIR and prepared the most recent Water Supply Assessment for the Phillips66 Refinery. In addition, Mr. Degner has experience with Stormwater Pollution Prevention Plans (SWPPP). In 2012, he prepared and implemented the SWPPP for the construction of a railroad spur line to a manufacturing facility in Victorville.

3.2 Project Management Program

This section discusses MRS's proposed project management program to meet the requirements of the Scope of Work identified in the RFP. This includes the approach to technical direction and control, cost control, schedule control, project reporting, editorial review, quality control, and management of subcontractors.

MRS specializes in the management and successful completion of complex, multidisciplinary environmental review projects. With many years of experience in project management, MRS guarantees a strong project management component as part of this proposal. MRS's case

management standards are applied to both small and large contracts to ensure work of the highest quality, meeting the needs of all clients within the agreed upon budgets. MRS has successfully used this approach with many past environmental and technical assignments.

The most important project management elements associated with this assignment focus on adherence to tight schedules, quality control, and communication. Close communication between the Project Manager, the MRS and subcontractor staff, and the County will be imperative. Formal communication will focus on the deliverables agreed upon for each task assigned. In addition, MRS expects close informal day-to-day communication, mostly by telephone and email. MRS will prepare monthly progress reports identifying the work completed during the previous period, any issues encountered, and plans for the upcoming month.

3.2.1 Management Team Roles and Responsibilities

MRS uses a three-tiered approach to managing environmental review projects. The first tier is the Project Manager who will provide overall direction to the team and who will interact with the County on a regular basis. The second level consists of the Issue Area Coordinators who are responsible for overseeing the development of their respective issue areas. The third level is the Principal Investigators, or technical experts, who will conduct a large amount of the work.

Project Manager

Mr. John Peirson, the Project Manager, will be responsible for the following major activities:

- 1. *Compliance with County Guidance*. Including regular working sessions with the County regarding the overall progress of the study.
- 2. *Contract Compliance*. Systematic review of the contract to make certain that the individual provisions and commitments are being met.
- 3. *Progress Reporting.* Includes preparation of the monthly status reports, which will contain information on the technical progress as well as the project expenditures.
- 4. *Budget Tracking*. Includes monitoring expenditures on a week-to-week basis and reporting this information.
- 5. *Interdisciplinary Coordination*. Involves the identification of cross-disciplinary impacts and the coordination of information flow among the various issue areas.
- 6. Staffing Adequacy. Ensures that key staff is available when their input and participation are required.
- 7. *Management of Subcontractors*. Includes establishing contractual agreements, as well as tracking deliverables and billing, to assure the coordination of subcontractor activities.

- 8. *Quality Control*. Includes the review of all quality assurance guidelines and will provide a quality control function on the preparation of the environmental or technical review document.
- 9. *Report Production Control*. Includes the organization of production requirements for the numerous draft and final report deliverables. These major deliverables will be coordinated by MRS's Ventura Office.

Issue Area Coordinators

Serving as front line managers, the Issue Area Coordinators will direct the technical work of the Principal Investigators for their respective issue areas. Their responsibilities will include:

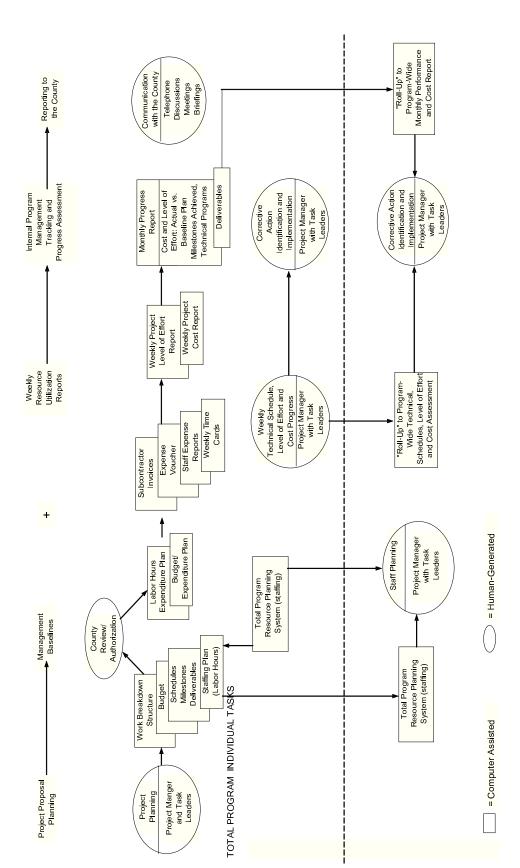
- Review and approval of work plans, schedules, and budgets for their Principal Investigators;
- Development of quality assurance guidelines for all field work being conducted by their Principal Investigators;
- Review and quality control of the technical documentation developed by their Principal Investigators;
- Preparation of the document sections that cover the coordinators' respective issue areas; and
- Preparation of monthly progress reports for their respective issue areas.

3.2.2 Project Management and Control Systems

Project management, which will span the entire life of the Project, is extremely important due to the controversial nature of the Project, the large number of interested parties, and the complexity of the technical issues. Project management will provide the necessary interface among the County, other responsible agencies, and the consultant Project team. Formal communication with the County will center on monthly progress reports, the deliverables agreed upon, and the program of scheduled meetings. At a minimum, MRS recommends monthly meetings with the County to review progress and discuss issues. There will be times when more frequent meetings will be required. MRS will work closely with the County for the duration of the Project to ensure that progress is carefully tracked, attention is drawn to any difficulties encountered, and the project is conducted in a highly professional manner.

During the course of a project, MRS's proven program management system and its associated defined controls will ensure consistent control of program costs, schedule, staffing, technical performance, deliverables, and subcontractors. The program management and control systems will ensure that the quality of the work will meet or exceed all the County's contract requirements. Figure 3-2 depicts the key planning and control processes used on a weekly and monthly basis to support program management of both individual tasks and the overall project.

Figure 3-2 Program Management System Flow Diagram



Proposal for Preparation of the Phillips SMR Rail Project EIR

The individual program control methods and systems that comprise this approach are described below.

Quality Assurance/Quality Control

In every project, MRS aims to provide the client with a high quality product that meets expectations, all applicable professional standards, and regulatory requirements. To meet this quality standard, Quality Assurance/Quality Control (QA/QC) procedures are developed for each project during the planning stage. MRS uses a number of management techniques for assuring and controlling the quality of the work product. In the area of QA, the major focus is on staff integration, communication, and the development of QA guidelines for field work and document production.

In addition, a comprehensive case management plan is prepared that serves as a blueprint for monitoring and tracking the progress of the project. MRS's QC program uses a multi-tiered approach to assure that all work products are of the highest quality and meet or exceed all of the County's contractual requirements. Each major component of the QA/QC program is described below.

Staff Integration Meetings

To facilitate coordination of the assessments and communication among staff members, MRS established a program of biweekly planning and coordination meetings based on an agenda developed and circulated in advance. The Project Manager will conduct these meetings to review work in progress, plans, and schedules and to ensure effective communication among the project team and with the County. The objective of these meetings is to ensure that the quality of communication—internal and external—is enhanced whenever possible.

Monthly Status Reviews

Because of the complexity and schedule constraints for environmental review projects MRS will conduct formal monthly status review meetings for Issue Area Coordinators to meet with the Project Manager for a technical, schedule, and budgetary assessment of progress. Monthly status reviews provide a forum for discussion and peer review of the quality of the work, which often leads to important improvements in performance from the widest possible sharing of information.

Problem Anticipation and Management

MRS recognizes problem anticipation and management as an explicit aspect of its Project Management Plan for this assignment. Unanticipated problems occur despite the best planning and intention. On task orders, MRS recognizes its obligation to anticipate, identify, and resolve all problems—technical, managerial and financial—as quickly as possible. Problems may be identified during the planning, execution, review, and reporting phases of the project. They can most often be avoided by thoroughly planning the program; realistically budgeting time, labor

and costs; clearly communicating with County staff; and closely monitoring the actual performance of the MRS staff and any associated subcontractors.

Problems will be most often identified by project staff as they work on the project. They may be practical problems (e.g., conditions experienced at field sites delay test operations) or conceptual problems relating to the steps in the technical approach. Many of them can be quickly solved by the involved staff members. Problems that cannot be solved in this way will be brought to the immediate attention of the Project Manager, who will then decide the best way to resolve the issue.

The Project Manager will present persistent problems to senior management at MRS for assistance in problem resolution to assure that contract performance meets all County expectations and standards. Table 3-1 summarizes potential problem areas and the management methods MRS uses to identify and resolve them at the earliest possible time.

A quality assurance guideline will also be developed for the document preparation activities. This will cover the preparation of technical appendices as well as the environmental or technical document. During the first month of a project, a document preparation manual, or style guide, will be developed to provide a detailed outline of the final report, a set of word processing templates that detail the style and structure of the report and technical appendices, a list of acceptable acronyms, and a standard format for figures and tables. This document will be submitted to the County for review and comment and then distributed to the project team. Please see Section 5.0, Document Preparation, for additional discussion of the Style Guide.

Cost and Schedule Control

MRS maintains cost, schedule, and resource control via a four step process. First, cost and schedule baselines are established, against which actual cost and schedule performance can subsequently be compared. Second, cost and schedule data are collected and reported on a weekly basis to the Project Manager. Third, actual performance is compared against baseline plans, identifying any deviations from plan. Fourth, deviations in cost or schedule performance are discussed internally and, if necessary, with County staff and corrective actions are taken. Each step is described below in more detail.

Establishing Cost and Schedule Baselines

MRS's internal program management system requires a comprehensive planning process at the initiation of each project to establish baselines against which to monitor expenditures, staffing, and progress. For each project, MRS establishes a task plan of individual work elements. For each work element, MRS will develop direct labor hours by individual staff members, non-labor expenses, and a schedule. This will serve as the project-specific proposal.

Table 3-1 Approach to Problem Identification, Management, and Resolution

Potential Problem	Method of Identification				
	Discussion with the County	Communication to Project Manager by Staff	Team Meetings	Progress Review by Project Manager	Possible Corrective Action
Change in County Requirements					
Accelerated delivery	•				Expand staff; accelerate schedule.
Modification of scope	•				Hold team meeting; revise staffing; revise schedule and budget as necessary.
Slippage in Schedule	•	•	•	•	Expand staffing; revise schedule in consultation with the County.
Attrition of Personnel		•	•		Execute backup plan for key staff; utilize existing resource pool.
Cost Growth	•	•	•	•	Absorb cost growth if no change in scope of work.
Quality of Work	•	•	•	•	Immediate meeting of Project Manager and appropriate Issue Area Coordinators; possible staffing changes.
Subcontractor Performance		•	•		Immediate discussions between Project Manager and Subcontractor; implement specific corrective action plan.
Delay in Review Process at the County	•				Hold in-person review to expedite review schedule; accelerate the response to comment schedule.

Once these data are developed and entered into the program, MRS will use their project management system to generate baselines for each task and its component work elements. This baseline will assist in staff planning, and most importantly, assist the Project Manager by

providing a computer-aided graphic comparison of actual labor utilization and expenditures against the baseline, revealing labor or cost variance.

Documenting Actual Cost and Schedule Performance

The basic input document that initiates cost and labor hour documentation and control is the Weekly Time Card. Each project is assigned a unique identification number, and hours worked each week on each project are recorded by staff members and entered into the company's computerized accounting system. Similarly, direct expenses are recorded on standard company expense report forms or other charge vouchers and charged to each project as incurred. The company's standard accounting system provides weekly and monthly summaries of expenditures to date and the balance remaining for any given project. These data are useful for monitoring project financial status. The system also produces an expense breakdown report for each project.

Comparing Actual Performance against Baseline Performance

On a periodic basis, the Project Manager will assess actual performance against baseline plans by estimating technical progress in terms of percent completion. Technical performance measurement will be based on quantitative measures where possible (e.g., number of sub-tasks completed, number of drawings completed) and otherwise on professional judgment. For cost control, the company's program management system can also be compared manually. For schedule control, progress and schedule monitoring will be based on bi-weekly meetings between the Project Manager and the Issue Area Coordinators, where estimates of the percentage of work completed can be compared with the baseline schedule.

Taking Corrective Action

Identifying deviations from baseline plans at the earliest possible time and taking appropriate corrective actions help maintain cost control. Corrective actions depend on the nature of the cost deviation and the reasons behind it. For minor deviations, corrective actions may include:

- Setting new lower targets for final cost, if expenditures are lower than expected;
- Identifying alternate methods for accomplishing contract objectives; and
- Amending the statement of work to define the best use of remaining funds.

If delays in the schedule arise during the course of the project, the Project Manager will discuss the situation with the County and apply similar corrective actions to recover and maintain the schedule.

3.2.3 Communications Procedures

Communication is a critical component in the analysis of a large, complex, and information-intensive project. Given the large number of issue areas typically covered by environmental review projects, cross-discipline communication is also extremely important. MRS's project management communication procedures are designed to accomplish the following objectives:

- Specify the formal communication and documentation procedures to be used by all team members;
- Institute a uniform method of recording actions and maintaining reference files;
- Assure appropriate data flow to and between team members; and
- Control the flow of data from the field to the Principal Investigators.

Transfer of information occurs on a daily basis via the one-on-one communication between Principal Investigators and Issue Area Coordinators. In addition, weekly meetings disseminate technical information such as baseline data, project description information, as well as information pertinent to multi-disciplinary environmental review projects.

MRS has a formal process for tracking and disseminating information and data for large projects. A centralized recordkeeping system maintains all data relevant to the project. Each piece of information is given a unique tracking number and placed in a central file. A computerized database is maintained noting all the information in central files, a method of organization which allows team members to electronically scan the information database and request copies of information. In addition, hard copies of the database are regularly printed and distributed to the project team.

As part of a typical environmental project, MRS develops fact sheets covering site history, project description, and alternatives, as well as cumulative projects. These fact sheets will contain information that is needed by the Principal Investigators to assess impacts and develop mitigation measures. The use of fact sheets assures that all project team members have consistent information on which to base impact assessments and mitigation measures.

3.2.4 Management of Subcontractors

MRS has a long history of using subcontractors on assignments to enhance in-house capabilities. MRS has developed a comprehensive system for managing subcontractors. Each subcontractor will be issued a purchase order that defines the scope of their work, the deliverables and due dates, and the associated cost estimate. The purchase order also contains the required billing and progress reporting instructions. These purchase orders serve as contracts with each of the subcontractors.

Each subcontractor will be required to submit a final work plan to MRS. The appropriate Issue Area Coordinator and the Project Manager will review the work plans. The work plan will include the scope of the study, a list of deliverables and due dates, estimated budgets for professional services and expenses, and a QA/QC program for assuring the highest quality work.

In addition, the Issue Area Coordinators will be responsible for monitoring the performance of each subcontractor who reports to them. The monitoring activities will include daily communication and monthly meetings—a combination that will both assess progress relative to

schedule and budget and will forecast work activities expected to occur during the next month. This information will be communicated to the Project Manager in our monthly status reviews.

MRS's working relationship with subcontractors is based on the principle that subcontractors are extensions of in-house staff. Subcontractors will have unlimited access to all project data and project library information, and they will be provided office space and support in the MRS Ventura office. Subcontractors will also be given access to MRS's in-house computer network which allows for easy entry to email, documents, reports, and data. This in-house computer network can also be remotely accessed by subcontractors and staff.

4.0 Study Methodology

This chapter discusses the approach of Marine Research Specialists (MRS) to preparing the Environmental Impact Report (EIR) for the Phillips SMR Rail Project. This EIR will include a project level analysis of the Rail Project and a programmatic level analysis of the Coastal Access Project. Throughout the project MRS will take direction from the County and follow the County's EIR standards, practices, and guidelines and the California Environmental Quality Act (CEQA) Guidelines issued by the State Office of Planning and Research.

The study methodology for each of the projects (Rail Project and Vertical Coastal Access) is discussed below.

4.1 Study Methodology for the Rail Project

The main purposes of the Project level EIR for the Rail Project include:

- Evaluating the environmental impacts associated with the Applicant's proposed project;
- Developing feasible alternatives that meet most of the basic objectives of the project and can potentially eliminate significant impacts caused by the proposed project; and
- Developing mitigation measures that can reduce the level of significance of impacts associated with the project and the alternatives.

The results of the EIR analysis will be used by the public and governmental agencies in making decisions regarding the project.

This section of the proposal is divided into two major segments. The first segment provides a general discussion of the proposed approach to each of the major EIR task. The second segment presents the detailed scope and approach to each of the environmental issue areas for the Rail Project. The approach to the Vertical Coastal Access is provided in Section 4.2, which is at the end of Chapter 4.0.

4.1.1 General Approach to EIR Tasks for the Rail Project

This section briefly discusses the proposed approach to each of the major tasks that are part of an EIR process.

4.1.1.1 Project Description

MRS will develop the project description based upon the information the Applicant has submitted to the County for the Rail Project. A review of the application documents shows that most of data is currently available to develop the project description. One of the first tasks would be to develop an information request for the Applicant on additional information that is needed

to complete the project description. Once this information has been provided by the Applicant MRS will develop a draft project description that would be submitted to the County and the Applicant for review and comment. MRS is proposing to have a meeting with the County and the Applicant to review comments on the project description. This will help to assure that the project description is an accurate representation of the Applicant's project. With the accelerated timeline, it is critical that an accurate project description be developed and agreed upon by the County and Applicant early on in the EIR process. This is extremely important since the project description data will serve as the basis for assessing the impacts associated with the proposed Project.

The project description chapter will address the need for the project, as well as the Applicant's proposed actions to implement the project. The project description will be dissected into construction and operational activities.

This is extremely important since the project description data will serve as the basis for assessing the impacts associated with the proposed Project.

4.1.1.2 Alternatives Analysis

The CEQA Guidelines, Section 15126.6, requires an EIR to describe a reasonable range of alternatives to a project or to the location of a project which could feasibly attain its basic objectives and evaluate the comparative merits of the alternatives. CEQA Guidelines, Section 15126.6, provides direction for the discussion of alternatives to the proposed project. This section requires:

- A description of "a range of reasonable alternatives to the project, or to the location of a project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives" [15126.6(a)];
- Setting forth alternatives that "shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project" [15126.6(f)];
- A discussion of the "No Project" alternative, and "if the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives" [15126.6(e)(2)]; and
- A discussion and analysis of alternative locations "that would substantially lessen any of the significant effects of the project need to be considered for inclusion in the EIR" [15126.6(f)(2)(B)].

For this EIR, it is critical to develop a defensible alternatives analysis that meets the following objectives:

- The alternatives analysis is comprehensive enough to assure that it has looked at a reasonable range of feasible alternatives to the proposed action; and
- The alternatives analyzed throughout the document are limited to only those that could feasibly attain the Applicant's basic objectives for the Project and that have the ability to reduce significant impacts associated with the proposed action.

In order to accomplish these objectives, MRS proposes an alternative screening analysis. An alternative screening analysis provides the basis for selecting alternatives that meet the second objective listed above, provides a detailed explanation of why other alternatives were rejected from further analysis, and assures that only feasible alternatives that can reduce significant impacts and meet the basic objectives of the project are evaluated and compared in the EIR.

This screening methodology also uses the "rule of reason" approach to alternatives as discussed in the CEQA Guidelines, Section 15126.6(f). The rule of reason approach has been defined to require that EIRs address a range of feasible alternatives that have the potential to diminish or avoid adverse environmental impacts. In defining feasibility of alternatives, the CEQA Guidelines state:

Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (Section 15126.6(f)(1)).

If an alternative is found to be technically infeasible, then it would be dropped from further consideration. Typically, this is the primary feasibility factor used to eliminate an alternative without further screening analysis. For example, other onshore locations for the drilling operations may be found infeasible given the current state of the directional drilling technology.

In addition, CEQA states that alternatives should "attain most of the basic objectives of the project" [Section 15126.6(a)]. If an alternative is found to not obtain the basic objective, then it would also be eliminated.

The use of a screening analysis for the alternatives ensures that the full spectrum of environmental concerns is adequately represented and that a reasonable choice of alternatives is selected for evaluation in the EIR.

Using this approach, the alternatives analysis section of the EIR will include: (1) a brief description of a range of reasonable alternatives to the proposed Project; (2) a screening analysis that summarizes and compares the significant environmental effects of the project and each alternative; and (3) an environmental analysis of the alternatives that were selected for further consideration in the EIR.

The first step in the alternatives analysis will be the development of alternative project descriptions. These alternatives could include alternative rail track layouts, use of a pipeline, use of tanker trucks, etc. One the alternative descriptions are drafted, MRS would submit them to the County and the Applicant for review and comment. As with the project description it is important that the descriptions of the alternatives be accurate and complete before continuing on with the rest of the alternatives analysis. The Applicant's input on the alternative descriptions is critical to assuring they are accurate.

4.1.1.3 Administrative Draft EIR

Preparing the Administrative Draft EIR requires the majority of project work. One of the first tasks will be to develop a Style Guide for the EIR that provides a detailed outline of the document and formatting information. The requirements for maps and figures are detailed in the Style Guide along with a list of appropriate acronyms. More information regarding the Style Guide is provided in Section 5.0, Document Preparation. A draft Style Guide will be submitted to the County for review and comment. Once the County has approved the Style Guide, MRS will issue the Style Guide and Microsoft Word document templates to the project team.

The major task for the Administrative Draft EIR is analyzing the environmental issue areas identified in the Notice of Preparation (NOP) and comment letters on the NOP. In the Administrative Draft EIR, each environmental issue area will contain the following major sections:

- Environmental Setting (Baseline);
- Impact and Mitigation Assessment (Project and Alternatives);
- Cumulative Impacts; and
- Mitigation Monitoring Plan.

The overall approach to the development of each of these major sections is discussed further in the following sections. Section 4.1.2 details the methodology that will be used for each of the issue areas.

Environmental Setting

For most issue areas, the baseline information is expected to be developed from previous studies in the area, field investigations, long-term monitoring activities, regulatory requirements, and other EIRs. The sources of information likely include state and local agencies, reports prepared

for the Applicant, and the previous CEQA documents for the SMR. Where data gaps are identified, MRS will conduct further surveys and field investigations to fill those gaps. MRS assumes that some field surveys will be necessary to verify existing data, particularly in the areas of biological and cultural resources.

The baseline sections from the recently completed Refinery Expansion Project, that MRS prepared, will serve as a strong starting point for developing this part of the EIR. For some of the issue areas the environmental setting sections from the Expansion Project EIR will only require minor updating (Traffic, Air Quality, Noise, Geology, etc). In other issue areas, more major modification will be needed to focus on the specific location of the Rail Project (Biology, Cultural, etc.).

The environmental setting for the Coastal Access Project will be developed at the sometime as the environmental setting for the Rail Project.

The Applicant is preparing a large number of documents on the project area that address a wide range of baseline issues. One of the first tasks will be to conduct a peer review of these documents to determine the adequacy and accuracy of the information and to determine if there are any data gaps. Information from the Applicant's documents that pass the peer review will be used in developing the environmental setting for the EIR. Where data from these documents is found to be lacking or in need of significant additional information, MRS will work with the County and the Applicant to determine how best to fill these significant gaps.

MRS proposes to submit a draft of the environmental setting section of the EIR to the County for review and comment prior to the release of the Administrative Draft EIR (see Section 6.0, Project Schedule, for more information).

Impact Assessments for the Project and Alternatives

One of the most important tasks in evaluating impacts is developing a set of well-defined significance criteria (or environmental thresholds) for each of the issue areas evaluated in the EIR. MRS proposes to develop the significance criteria prior to the assessment of impacts and to agree on these with the County in advance. Where available, significance criteria will be based upon existing County environmental thresholds or standards. Where criteria do not exist, they will be developed based on criteria used in previous EIRs or existing CEQA Guidelines. The significance criteria developed with the County for the Refinery Expansion Project EIR will serve as the basis for the criteria. With well-defined criteria, the impacts can be classified in terms of significance with a greater degree of confidence.

This impact assessment will also take into account coastal plan policies and the area plan document policies that are implemented as standards pursuant to the Coastal Zone Land Use Ordinance (CZLUO). These would include policies such as Policy 1a and 30 that address Environmental Sensitive Habitat Area (ESHA). In some cases these policies serve as thresholds,

and as needed mitigation measures would be developed for area where the project is not consistent with these policies. This is discussed further in the relevant issue area study methodologies below.

Mitigation Measures and Residual Impacts for the Project and Alternatives

One of the major goals of an EIR is identifying potential impacts and then developing reasonable, feasible, and effective mitigation measures to reduce the impacts to insignificance. During the course of preparing an EIR, mitigation measures are identified by issue area. Coordination between issue areas is important; otherwise mitigation measures in one issue area are not carried through into other issue areas to determine if any residual impacts exist. In order to facilitate the coordination of impacts and mitigation measures, one of the main jobs of the project manager is to ensure consistency of the mitigation measures across the various issue areas. This approach assures that each mitigation measure is evaluated thoroughly and all the potential residual impacts are addressed for each of the issue areas.

For those impacts identified as significant, MRS will develop mitigation measures that will reduce the level of significance, if possible. The mitigation measures that MRS develops may be design changes, technology-based measures, new or revised management systems for project operation, or administrative procedures to ensure that certain processes or environmental conditions are carefully monitored. The mitigation measures will address primary and secondary impacts associated with the project.

In the approach to evaluating impacts, MRS will distinguish between impacts before and after mitigation. Significant impacts that cannot be mitigated to a level of insignificance will be categorized as Class I impacts. Class II impacts are those that are significant prior to mitigation, but can be mitigated to a level of insignificance. Class III impacts are adverse but not significant prior to mitigation. For Class III impacts, mitigation measures may be recommended if they could reduce the adversity of the impact. Class IV impacts are beneficial impacts.

Cumulative Impacts

The cumulative impact portion of the assessment is designed to address the cumulative impacts associated with reasonable, foreseeable projects within the study area. One of the first steps in the cumulative analysis will be to work with the County and other agencies in developing a cumulative projects list.

MRS will identify projects in the same vicinity as the proposed project, which could lead to cumulative impacts. MRS proposes to work with the County and other responsible agencies to determine which of these projects should be included in the cumulative analysis. Using this information, a cumulative projects description will be developed, which will detail all projects on the cumulative list. The cumulative projects description will be submitted first to the County for review and approval and then to the project team.

Mitigation Monitoring Plan

The mitigation measures and the mitigation monitoring plans developed for each issue area will be consolidated into a comprehensive mitigation monitoring program. The monitoring program will identify all mitigation monitoring requirements placed on the County and other agencies and also the reporting requirements of the Applicant. The need for subsequent verification by onsite inspection will also be defined in the monitoring program, together with any post-construction monitoring that may be required to evaluate the effectiveness of the mitigation measures and a dispute resolution procedure in the event the monitoring program generates disputes between the relevant agency and the Applicant.

The mitigation monitoring and reporting plan will provide a list, by topic, of all proposed mitigation measures. For each measure, a summary will list the requirements of the proposed measure and what, if any, approvals are needed from various agencies. The plan will also include a table of the following information:

- Impact;
- Mitigation measure and identification number;
- Method of verification,
- Timing for implementing the measure; and
- Party responsible for verification;

These mitigation monitoring criteria will be developed for each mitigation measure in each issue area. The draft mitigation monitoring plan will be provided to the County at the same time as the Administrative Draft EIR.

Comparison of Alternatives

As required by CEQA, MRS will determine the environmentally superior alternative. The determination of the environmentally superior alternative will be performed by conducting a comparative analysis of all issue areas of the mitigated impacts for each alternative evaluated throughout the document. Alternatives that are unfeasible, would not reduce significant impacts over the proposed Project, or would not meet the project objectives, will be dropped from further consideration and will not be included in the comparison of alternatives.

4.1.1.4 Prepare Public Draft EIR

Preparation of the Public Draft EIR will incorporate all of the comments received from the County on the Administrative Draft EIR and produce a "camera ready" copy of the EIR for final review by the County. Once the County has signed off on the "camera ready" document, MRS will be responsible for printing and mailing the Public Draft EIR. MRS will provide bound copies of the Public Draft to the County in three-ring binders with tabs for each of the major sections. MRS will also work with the County to make sure that the Public Draft EIR is available online for download. MRS will also provide the County with CDs of the Public Draft EIR. MRS

will also provide the County with bound copies of the Executive Summary for members of the public who do not want to read the entire EIR. All bound copies of the EIR and the Executive Summary will have a CD of the entire EIR. Section 5.0, Document Preparation of the proposal provides more information on the document preparation task.

4.1.1.5 Prepare Administrative Final EIR

At the close of the public comment period on the Draft EIR, MRS will prepare the Administrative Final EIR. This task involves preparing written responses to all the comments received on the Public Draft EIR and modifying the EIR document as needed to address the comments.

All the comment letters received on the Public Draft EIR will be numbered with unique codes. The Project Manager and the Issue Area Coordinators will assign responsibility for responding to the comments. The draft responses for each comment will be assembled into a Response to Comments section that will be added to the EIR. The EIR will be modified as required by the comments. Areas of the EIR that are modified in response to the comments will be marked with revision marks. As needed, the Response to Comments section will guide the reader to changes in the EIR and to additional information in the EIR that addresses the comment.

MRS will submit an Administrative Final EIR to the County that includes all of the responses to comments, as well as all of the changes to the Public Draft EIR. This will allow the County to review the responses and confirm that the appropriate changes were made to the EIR. In developing the cost estimates for response to comments, MRS assumes that no new analyses will be required to prepare the responses to comments or the Administrative Final EIR.

4.1.1.6 Prepare Proposed Final EIR

Preparation of the Proposed Final EIR will incorporate all of the comments received from the County on the Administrative Final EIR; the Proposed Final EIR will also include the Response to Comments section. MRS will produce a "camera ready" copy of the EIR for final review by the County. Once the County has signed off on the "camera ready" document, MRS will be responsible for printing and mailing the Proposed Final EIR. MRS will be responsible for printing 45 bound copies of the Proposed Final. The majority of these copies will be in three-ring binders with tabs for each of the major sections. MRS will also work with the County to make sure that the Proposed Final EIR is available online for download. MRS will also provide the County with CDs of the Final EIR. MRS will also provide the County with bound copies of the Final Executive Summary for members of the public who do not want to read the entire Final EIR. All bound copies of the EIR and the Executive Summary will have a CD of the entire EIR.

4.1.1.7 Public Meetings and Hearings

In developing the costs for this project, MRS assumed that various team members will participate in four (4) meeting with the County, two (2) public hearings, and one (1) scoping meeting. We have also included two (2) public meetings on the Public Draft EIR. As needed, MRS will be responsible for developing presentations for these meetings/hearings. MRS has assumed that the County will be responsible for recording and transcribing the public meeting, if needed, for the official record.

4.1.1.8 Assistance with CEQA Findings and Staff Reports

MRS included time to assist the County with the preparation of the CEQA Findings as well as various sections of staff reports. The sections where MRS will provide assistance to the County include CEQA and policy findings, conditions of approval, EIR certification resolution, and any statement of overriding consideration. As MRS has demonstrated in the past, we are prepared to provide ongoing support to the County during the staff report and hearing process.

4.1.2 Issue Area Study Methodology for the Rail Project

This remainder of this section of the proposal provides the study methodology for the Rail Project for each of the issue areas.

4.1.2.1 Aesthetics

This section presents the scope and approach for assessing the project and alternative impacts for aesthetics and visual resources.

General Approach and Methodology

The Project site is located in an area in unincorporated San Luis Obispo County generally west of the community of Nipomo. The Santa Maria Refinery property is open to public view from locations along Highway 1 and local roads, though the existing topography limits views of the property. The Project site is currently characterized by the existing refinery infrastructure and grazed open space. Surrounding lands are used for intensive agriculture, for the storage of recreational vehicles, and for vehicle recycling.

The Project could have aesthetic impacts by introducing a new industrial feature (rail cars and rail tracks) on the property. Through peer review of the Applicant's Land Use Application Visual Simulations Appendix, as well as through its own process of identifying aesthetic and visual resources (i.e., site visits, aerial maps, etc.) MRS will establish the baseline setting and governing policies. MRS will then assess the Project's potential impact to the existing aesthetic quality of the area.

Impact Assessment of the Project and Alternatives

MRS will review the Project for impacts to aesthetic resources. The new facilities would be constructed within a 1,650-acre piece of land zoned industrial. The proposed facilities could be as high as 28 feet for the rail car canopy and 35 feet for a light pole; however, there are few public vantage points from which the Project would be visible. Based on peer review of the Applicant's Visual Simulations, MRS may generate additional photo simulations from critical viewing locations not already documented that show the Project facilities. However, it should be noted that based on preliminary review of the Applicant's Visual Simulations, additional photo simulations would likely not be required. The aesthetics impact analysis would also address night lighting at the facility.

Mitigation measures will be proposed for each significant impact, if any. The mitigation measure program will specifically outline components designed to ensure impacts are reduced to a less than significant level. The analysis will consider the cumulative visual impacts associated with the Project and other identified projects recently completed, planned, or reasonably foreseeable in the area. MRS will also assess the visual impacts associated with the Project alternatives that are identified for further analysis as part of the alternative screening. A discussion of the disadvantages and merits of each alternative will be provided.

4.1.2.2 Agricultural Resources

This section presents the scope and approach for assessing agricultural resource impacts associated with the proposed project.

General Approach and Methodology

Agricultural production in the Nipomo region consists of irrigated row crops, vineyards, grains, orchards, greenhouses, and livestock. The project site is zoned for Industrial land use, and a portion is developed by the existing ConocoPhillips facility. The remaining area consists of undeveloped land and cattle grazing, and is not under Williamson Act contract. Surrounding parcels are within the Agriculture land use category, and several adjacent parcels to the north and south are under Williamson Act contract, and support row crops.

The underlying soils are Dune land and Oceano sand (0-9% slopes). Both soils types are non-irrigated, and are soil class 8 and 6, respectively. Class 6 soils have severe limitations that make them generally unsuitable for cultivation and are typically restricted to pasture, rangeland, forestland, or wildlife habitat. Class 8 soils have limitations that restrict their use to recreational purposes, wildlife habitat, watershed, or aesthetic purposes (NRCS 2013). Oceano sand is designated Farmland of Statewide Importance (NRCS 2013), and is listed as Important Agriculture Soils (Farmland of Statewide Importance) in the County Conservation and Open Space Element (2010).

Based on the location and absence of production agriculture on the project site, construction and operation of the project does not appear to have the potential to result in direct adverse effects to agricultural resources. The agricultural resources impact analysis will evaluate potential impacts to agricultural uses in the project vicinity resulting from the proposed construction and operation of the proposed project (e.g., creation of dust, groundwater use, potential risk due to spills or other hazards). The analysis will provide baseline information regarding site and area soils, but will focus on indirect impacts to surrounding agricultural operations. The agricultural resources evaluation will include:

- Consultation with the Agricultural Commissioner's office
- Description of the history of agricultural use and production in the vicinity
- Baseline information regarding the geology of the site and vicinity, focusing on agricultural capability of soils
- Assessment of risk of spills (i.e. frequency, volume) and the resulting impacts to surrounding agriculture
- Application of measures to reduce risk to surrounding agriculture

Impact significance will be quantified using significance criteria for agricultural resources and operations. If potentially significant impacts are identified, mitigation measures will be proposed, where possible, to reduce the impact to a level of insignificance.

Impact Assessment of the Project and Alternatives

Numerous environmental documents and studies have been prepared for the project area, which describe soils and agricultural suitability of the site and surrounding areas. SWCA will incorporate existing data into the analysis from the various available sources. SWCA will contact the Agricultural Commissioner's office to solicit comment and verify conclusions regarding agriculture value of the site and surrounding areas. SWCA will document communication with the agency and include pertinent comments in the EIR analysis.

The proposed project poses the following risks to existing agricultural operations and productive soils: ongoing use of groundwater, and risks of spills or other accidents that could contaminate water or soil or cause fire damage.

Groundwater. The existing water supply consists of onsite wells, which would continue to be used for the proposed project. This section of the EIR will reference information from the Water Resources section of the EIR regarding groundwater extraction and site water use and evaluate impacts to surrounding agriculture associated with facility water use.

Spills/Accidents. The facility is subject to provisions of various codes which require plans and built components designed to reduce risks associated with accidental release. Information from the Hazards/Hazardous Materials section of the EIR will be referenced to determine the level of

risk to surrounding agricultural operations. The analysis will include both construction and operational phases of the project.

SWCA will propose mitigation measures for each significant impact. Measures to reduce risks to soil and water will be based on information provided in the safety and hazardous materials section. The cumulative impact analysis will consider potential agricultural expansion/intensification in the area and identify additional impacts.

Project alternatives will be individually evaluated and compared in terms of their relative impacts to agricultural resources. A discussion of the disadvantages and merits of each alternative will be provided.

4.1.2.3 Air Quality/Greenhouse Gases

The project region in San Luis Obispo County is currently in violation of the state standards for ozone (O3) and respirable particulate matter (PM10) and in violation of the Federal ozone standards in the Eastern Portion of SLO County. The evaluation of project air quality impacts will focus on potential O3 precursor (reactive organic compounds [ROC] and nitrogen oxides [NOx]) and PM10 emissions. The air quality analysis also will evaluate potential impacts from proposed sources of odors and toxic air contaminants (TACs). The San Luis Obispo Air Pollution Control District (SLOAPCD) presents methods to evaluate air quality impacts for CEQA purposes. The MRS air quality staff has previous experience in the evaluation of emission sources and impacts of projects in San Luis Obispo County, and they are familiar with SLOAPCD guidelines used to assess proposed emissions.

General Approach and Methodology

Our general approach to the air quality assessment will be to focus on both baseline (i.e., existing conditions) and impacts associated with the proposed project and alternatives. The analysis will cover potential impacts from emissions of criteria air pollutants, toxic air contaminants, greenhouse gasses (GHG) and odor causing compounds.

The potential impacts from increased emissions of criteria pollutants will be assessed against the local Air District's threshold criteria and state and federal ambient air quality standards. Guidance will be sought from the SLOAPCD on the assessment of impacts from any of the toxic air pollutant sources that are identified. Regulations ensuing from the Clean Air Act Amendments of 1990 will also be taken into consideration. Mitigation measures will be developed in accordance with the Air District's current Rules and Regulations, Clean Air Plan and CEQA Handbook. Toxic emissions and impacts will be assessed using the AERMOD model used to quantify TAC emission impacts in terms of cancer risk and chronic and acute health hazard indices primarily for diesel construction and operational emissions.

The existing air quality and meteorological conditions will be characterized to provide an environmental setting that the proposed project emissions will impact. The attainment status in

regards to the Ambient Air Quality Standards (AAQS), particularly for ozone (for State and Federal standards) and particulate matter (for State standards), will indicate the areas most sensitive to increases in ambient concentrations of air pollutants.

Impacts from the emissions of inert pollutants will generally be limited to the regional vicinity of the project and transportation corridors. Thus, for the project location, a study area that includes southern San Luis Obispo County and the South Central Coast Air Basin will be selected.

The environmental setting will include characterization of the area with regard to the existing air quality, the regional air pollution and climate meteorology, local trends and air pollutant concentrations and the applicable air regulations and attainment status. Existing data will be updated and refined as it applies to the project. Meteorological data will utilize information developed as part of the particulate studies currently being conducted on the Arroyo Grande mesa.

Federal, state and APCD air quality regulations, and the Clean Air Plan, will be reviewed to identify those items that apply to the project. Discussions with regulatory agencies will be carried out to identify pending regulations that might affect the project.

A discussion of permit conditions that would be triggered by the proposed project will also be included, such as calculations of increases in criteria emissions and additional control technology that would be required. Close coordination with the APCD will ensure a thorough analysis.

Impact Assessment of the Project and Alternatives

The development of technically sound emissions inventories for the project will be one of the most important aspects of the air quality impact assessment. Detailed emission inventories of the current operations are available from the APCD, which will minimize the level of work effort related to baseline characterization. Separate inventories will be developed for emissions associated with the proposed project and alternatives.

Emissions calculations performed by the Applicant will be peer reviewed and supplemented to address deficiencies. The SLO APCD letter on the initial study will be used, along with communication with the APCD, and independent analysis, to supplement the Applicant air emissions estimates.

Criteria emissions from the proposed project will be assessed for operational and construction related emissions. Construction emissions will assess the emissions from fugitive dust, soil movement and hauling, construction equipment, etc. A listing of construction activities (including tank modifications, removal of old rail siding, pipeline installation, offsite hauling, refueling station, offsite workers commuting, etc) will be developed, in part from the Applicant materials, discussions with the APCD and through MRS experience monitoring compliance on construction sites. Fugitive dust emissions containing naturally occurring asbestos and

demolition involving asbestos containing materials will also be assessed and mitigation measures recommended.

Operational emissions will include emissions from the new boiler, if applicable due to the diversion of gas steam from other equipment, locomotive emissions, hydrocarbon emissions from un-loading of rail cars, etc. The effectiveness of the vapor recovery system will also be assessed.

For any source of toxic air contaminants (primarily diesel emissions), emissions will be estimated using the appropriate ARB or EPA emission factors and source speciation profiles, and the CAPCOA Technical Guidance document that was developed for estimating toxic emissions for the Hot Spots program and the EPA Superfund Guidance documents.

Criteria emissions from mobile sources will be estimated utilizing the EMFAC2011 software, which includes fleet-based emission factors (EMFAC) appropriate to the study area. Toxic emissions associated with diesel powered mobile sources will be analyzed for diesel equipment to assess the potential impacts of vehicles (i.e. locomotives) on residences. The HRA prepared for the refinery in the past have indicated a peak risk levels due to diesel combustion, so the inclusion of diesel emissions from locomotives onsite is important.

Mitigation measures would utilize the CARB Diesel Risk Reduction recommendations towards the use of catalysts to reduce diesel hydrocarbon and PM emissions and the guidance in the currently proposed CARB regulation "Reduction of Emissions of Diesel Particulate Matter, and Other Pollutants from In-use Heavy-duty Diesel-fueled Vehicles".

Construction equipment emissions will be calculated based on the emission factors tabulated for CalEEMod along with the modifications specified in the SLOAPCD Guidance documents, including the use of Carl Moyer load factors. Emissions will be calculated using spreadsheets and activity timing as well as an estimate of the construction equipment requirements Mitigation measures related to construction will utilize SLOAPCD recommended measures, particularly related to fugitive dust measures to reduce fugitive dust emissions during grading.

Emissions of green-house gasses will also be assessed for all construction activities and operations, both baseline and proposed operations. GHG emissions will be quantified in the same manner as criteria pollutants, with emission factors and tabulated in columns next to the criteria pollutants. Regulatory requirements will address recent GHG emission regulation, such as AB 32. GHG, including carbon dioxide (from combustion), methane (from combustion and fugitive emissions), nitrous oxide and hydrofluorocarbons will be addressed. GHG emissions will be assessed for both direct (located on-site) and indirect (from mobile sources and electricity generation) and will address life-cycle issues such as transportation and end-use, including transportation of crude oil within and outside the state of California. Electrical generation GHG emissions will utilize the CalEEMod factors associated with the electricity provider in the area.

As the Applicant proposes to divert some of the fuel gas currently used for electricity generation to steam production to supply heat for the proposed rail spur, more electricity will need to be purchased from the grid and this will be accounted for in the calculations of indirect GHG emissions.

Mitigation measures will also be developed to reduce GHG emissions. We will coordinate closely with the APCD on classification of the impacts as to significance and thresholds.

Sources of information needed for this analysis will include previous environmental analyses for other projects in the area, Applicant data submitted as part of the project and as part of the facility permit requirements (which will be peer reviewed), as well as specific emission profiles for equipment proposed for construction and operations.

4.1.2.4 Biological Resources

This section presents the scope and approach for assessing the biological impacts associated with the proposed project.

General Approach and Methodology

The biological resources analysis will begin with a comprehensive review of all available and relevant background materials. At a minimum, the EIR analysis will include review and incorporation of the following relevant documents:

- Phillips 66, Botanical Assessment, Santa Maria Refinery Project, San Luis Obispo County, California (Arcadis 2013)
- Phillips 66, Wildlife and Habitat Assessment, Santa Maria Refinery Project, San Luis Obispo, California (Arcadis 2013)
- Updated applicant prepared biological studies and mapping (pending)

The technical studies prepared on behalf of Phillips 66 will be evaluated for content, accuracy, and consistency with local, state, and federal regulatory requirements. Additional information will be obtained from the California Natural Diversity Database (CNDDB), California Native Plant Society (CNPS), California Department of Fish and Wildlife (CDFW), U.S. Fish and Wildlife Service (USFWS), regional conservation planning documents, and existing biological resource documentation for other local projects. SWCA biological resource specialists will peer review, compile, and utilize the existing information to the greatest extent feasible.

Following the review of existing information, our team will conduct field surveys to verify general accuracy of the maps and other information contained in the above-referenced background materials, and (if necessary) to obtain additional biological information to adequately meet the standards for EIR analysis. Based on the existing information provided to date, we assume that the applicant will provide an updated botanical assessment of the project area. The current Botanical Assessment does not adequately address botanical resources, as the

studies were conducted in fall of 2012, outside of the typical blooming period for many annual plant species. The applicant indicates that a spring survey is underway; however, in order to meet the State and Federal standards, we recommend that the results of the updated botanical survey be provided for inclusion in the EIR. We will immediately communicate any other issues that may arise during the peer review that would affect the analysis and defensibility of the EIR, in order to efficiently determine next steps.

Preparation of the Biological Resources Section of the EIR will include a description of the site's biological attributes (derived in part from the background review and field surveys noted above), as well as individual narratives on the current status of sensitive and special status plants, animals, and habitats. Updated maps of vegetation and occurrences of rare plants and wildlife will be prepared for the project, using a combination of ground-truthed background study information, and any new information provided by the applicant (i.e. spring botanical survey). This section will also address Sensitive Resource Area (SRA) and Terrestrial Habitat (TH) designations. The EIR will include a discussion of consistency with the policies and standards related to these designations, or an explanation regarding applicability based on the intent and boundary of the designation and analysis of potentially-sensitive resources.

Impact Assessment of the Project and Alternatives

Biological resources include sensitive and non-sensitive vegetation communities, plants, and wildlife. The analysis includes synthesizing and verifying the accuracy of existing information for integration into the EIR. This would be accomplished through detailed review of all previous studies for adequacy and consistency with established agency standards and protocols, and performance of additional field surveys to ground-truth study results and provide necessary new information.

It is assumed that all technical biological studies that are prepared by the applicant's consultant will be current and adequate for EIR review. As previously mentioned, it is assumed that the applicant will update the botanical survey data for 2013 to include a full floristic survey, at a minimum. To ensure an accurate representation of the baseline environmental setting, SWCA biologists will verify the findings of these reports through field surveys. General wildlife surveys will be conducted over the project site to review habitat mapping and sensitive species data. Protocol surveys for wildlife will not be conducted as part of this scope of work.

As currently shown in the existing Sensitive Species and Habitat Map prepared by the applicant, the proposed project has the potential to impact sensitive plants such as California spineflower (Mucronea californica) and Blochman's ragwort (Senecio blochmaniae). Nipomo mesa lupine (Lupinus nipomoensis) is known to occur, and presence or absence is expected to be verified by the applicant's consultant during 2013 spring surveys. Potentially affected wildlife species include, but are not limited to, burrowing owl (Athene cunicularia), coast horned lizard (Phrynosoma coronatum), and silvery legless lizard (Anniella pulchra ssp. pulchra). SWCA

also understands that a large amount of vegetation will be removed as part of the proposed project.

The EIR will include a thorough discussion of potential impacts to biological resources that could result from the proposed actions. Direct, indirect, and cumulative impacts will be analyzed consistent with criteria set forth by CEQA and the County's Initial Study Checklist, and will be discussed in context with Coastal Plan Policies and the South County Coastal Area Plan. Both short- and long-term impacts to biological resources will be considered for the proposed action. The analysis will specifically focus on project actions, including the railroad extension, design alternatives, access roads, maintenance activities and pipeline corridors. Our team will also evaluate these project components with respects to coastal policies related to Environmentally Sensitive land uses, terrestrial habitat within the Coastal Zone, protection of dune vegetation, and protection of native vegetation and sensitive habitats. An evaluation of monitoring and maintenance components of the project will determine the possibility of long-term impacts.

Mitigation proposed as part of the project design will be evaluated for adequacy, efficacy, and consistency with accepted standards. Additional measures designed to avoid or offset significant impacts to biological resources will be developed where necessary. Measures to improve or enhance site restoration, habitat rehabilitation, and resource management plans will be included as mitigation, as appropriate. Mitigation measures will be consistent with the planning and land use documents adopted by the County. Our team will also consider mitigation guidance with respects to burrowing owl (Burrowing Owl Consortium 1993) as a result of potential impacts that may occur to this species and known den locations. A discussion of residual impacts of the proposed project that are expected to remain after implementation of recommended mitigation measures, if any, will be included.

Cumulative impacts will be evaluated from local and regional perspectives. For example, the proposed project may contribute to a cumulative loss or degradation of a habitat type. Development projects approved, pending, or planned for the project area will be considered in the cumulative impact analysis.

Project alternatives will be individually evaluated and compared in terms of their relative impacts, both deleterious and beneficial, to biological resources. A discussion of the disadvantages and merits of each alternative will be provided.

4.1.2.5 Cultural Resources

This section presents the scope and approach for assessing impacts for cultural and archaeological resources for the project.

General Approach and Methodology

The cultural resources analysis will include a comprehensive review of all relevant background materials including, but not limited to, the *Cultural Resources Assessment Report* (Arcadis 2013)

and Archaeological Surface Survey (Thor Conway 2012). Technical studies prepared on behalf of the applicant will be evaluated for content, accuracy, and consistency with local, state, and federal regulatory requirements. SWCA cultural resource specialists will peer review, compile, and utilize the existing information to the greatest extent feasible. The peer review will include an assessment and verification of the following key elements: 1) survey areas documented in the cultural resources studies prepared for the project address the entire project and all areas of potential disturbance; 2) consultation with the California Native American Heritage Commission (NAHC) was conducted; and, 3) findings and recommendations from these efforts are accurate and would adequately avoid or minimize potential impacts to significant cultural resources.

While the technical study prepared for the project site (Arcadis 2013) indicated that the NAHC search of the Sacred Land File was negative for the presence of cultural resources, there is currently no documentation of follow-up letters sent to individuals and interested parties listed in the NAHC response letter. The goal of this type of individual consultation is to request any specific information that local interested Native American parties may have regarding cultural resources within or near the project area. To address issue, SWCA will prepare and send letters to each of the identified individuals and interested parties provided in the contact list of the NAHC response letter.

The Cultural Resources section of the EIR will contain a description of the region's historical and cultural ethnography, a summary of documented resources in the vicinity (derived from the background review as noted above), and analysis of potential impacts to cultural and archaeological resources.

Impact Assessment of the Project and Alternatives

The project is located near the Nipomo Mesa, an area that was originally occupied by the Chumash, and exhibits a long and detailed history of Spanish, Mexican, ranching, industrial, and agricultural activity. Prehistoric and historic sites are known within the vicinity of project area; however, none are known to occur immediately within or adjacent to the project site. Current project plans and reports suggest that cultural resources will be avoided and no adverse impacts are anticipated.

Upon verification of existing documentation, SWCA will conduct an analysis of potential short and long-term impacts to cultural and archaeological resources that could result from the proposed project actions. Direct, indirect, and cumulative impacts will be analyzed consistent with criteria set forth by CEQA and the County Initial Study Checklist, and will be discussed in context with local land use policies and ordinances. Project alternatives will be individually evaluated and compared in terms of their relative impacts, both adverse and beneficial. A discussion of the disadvantages and merits of each alternative will be provided. A discussion of residual impacts of the proposed project that are expected to remain after implementation of recommended mitigation measures will be included.

The applicant proposes to utilize cultural resources training, cultural resources monitoring, and standard inadvertent discovery clauses as mitigation measures. Additional measures designed to reduce significant impacts to cultural and archaeological resources will be developed where necessary. A discussion of residual impacts of the proposed project that are expected to remain after implementation of recommended mitigation measures, if any, will be included.

Cumulative impacts will be evaluated from local and regional perspectives. Development projects approved, pending, or planned for the project area will be considered in the cumulative impact analysis. The County Department of Planning and Building will be contacted regarding upcoming or proposed projects in the vicinity, and all such projects will be included in the cumulative analysis.

4.1.2.6 Geological Resources

This section presents the scope and approach for assessing the project and alternative impacts for geological resources.

General Approach and Methodology

MRS will review reports prepared for the site and surrounding area to assess the regional and local geologic conditions. Phillips 66 has prepared an Initial Study and Land Use Application, both of which include environmental setting information pertaining to geological resources. This information, in addition to baseline information prepared by MRS for the recently completed refinery expansion EIR, will be peered reviewed and incorporated into the environmental setting section, as appropriate. If available, geotechnical reports completed for the project will also be reviewed. In addition, MRS will perform a detailed site reconnaissance to assess existing conditions. Upon compilation and review of relevant information, MRS will write the technical section for the EIR, addressing all geologic and geotechnical hazards, potential impacts, and mitigation measures.

With respect to geologic hazards, the liquefaction potential for the project area is moderate, due to shallow groundwater and sandy dune soils. Phillips 66 has designed all facilities based on geotechnical investigations to minimize impacts due to geologic hazards. Phillips 66 selected the straight track as the proposed project based on its reduced effect on the environment. The straight track alignment is located on undulating dune topography, with elevations ranging from approximately 80 to 110 feet above mean sea level. Relatively minor amounts of cut and fill would be required for the project. The alternative loop configurations would require substantial fill (i.e., up to 448,000 cubic yards) to raise the southern portion of the project site, resulting in increased potential for slope instability and offsite erosion induced sedimentation of local drainages, such as Oso Flaco Creek. In addition, excavations in sand dunes would be required for the larger loop alternative, which would alter the topography and potentially exacerbate erosion. Aboveground construction of the proposed pipeline would minimize geologic impacts due to a lack of excavations and stockpiling of soil, thus reducing potential construction related

erosion. In addition, potential repairs to an aboveground pipeline would reduce erosion induced impacts, due to a lack of pipeline dig-ups.

Impact Assessment of the Project and Alternatives

The proposed railroad spur and associated oil pipeline would be susceptible to damage as a result of an earthquake on the onshore Los Osos Fault, the offshore Hosgri Fault, or other regional faults. Shallow groundwater and sandy soils have created a moderate potential for liquefaction in the project area. Lateral spreading and seismically induced settlement typically occur in association with liquefaction. Seismically induced ground failure, excessive erosion, or corrosion could result in damage to facilities and associated oil spills. Remediation of such spills would, in turn, potentially cause soil erosion induced water quality impacts to nearby drainages, such as Oso Flaco Creek. As part of the analysis a peer review of any geotechnical studies prepared by the Applicant for the project will be conducted.

The criteria that will be used to determine whether the proposed project has the potential for significant geological impacts will be based on the County of San Luis Obispo Initial Study Checklist. The evaluation will include a discussion of impacts, for both the proposed project and the alternatives, associated with seismically induced ground movement, soil erosion, and potentially unstable soil conditions, as well as consistency with the County's Safety Element related to geologic and seismic hazards. Mitigation measures will be included that could be imposed on the project to minimize potential impacts related to geological resources. In the absence of an applicant provided SWPPP, such a plan would be included as a mitigation measure to offset potential erosion related impacts to water quality. Similarly, in the absence of an applicant provided oil spill contingency plan, such a plan would be included as a mitigation measure to offset potential oil spill related impacts. MRS will assess the potential cumulative geologic impacts associated with the proposed project and other identified development projects recently completed, planned, or reasonably foreseeable in the area.

4.1.2.7 Hazards and Hazardous Materials

This section presents the scope and approach for assessing potential hazards and hazardous materials impacts associated with the Project, alternatives and cumulative projects.

General Approach and Methodology

Phillips 66 proposes to modify the existing rail spur currently on the southwest side of the Santa Maria Refinery. The project would include an eastward extension of the existing rail spur as well as a railcar unloading facility. The trains would deliver crude oil to the Santa Maria Refinery for processing. The unloaded material would be transferred from the new unloading facility to existing crude-oil storage tanks via a new on-site above-ground pipeline.

The Risk Assessment will evaluate the potential changes in risk associated with the proposed activities and alternatives. The analysis will utilize established risk guidelines to evaluate the

significance of potential incremental risk increases/decreases associated with the Project and alternatives. The analysis will focus on evaluating the transportation and storage of hazardous materials.

Impact Assessment of the Project and Alternatives

The risk of upset section has been divided into two parts. The first part addresses the risks associated with the proposed facility modifications and the impact of upset scenarios on nearby sensitive receptors (e.g., residences, schools and hospitals); the second part addresses increases in risks due to crude oil transportation.

Risks Associated with Facilities

In order to establish the baseline risk for the proposed facilities, including those associated with the new rail spur and unloading facilities, MRS will prepare a <u>qualitative</u> risk analysis (QRA). MRS will conduct the QRA according to the recommendations of the Center for Chemical Process Safety and the Health and Safety Executive of the United Kingdom. These guidelines have been used before as the basis for other QRAs conducted for oil and gas facilities in San Luis Obispo County. Figure 4-1 shows the steps involved in developing a QRA.

The development of the QRA will involve five major tasks:

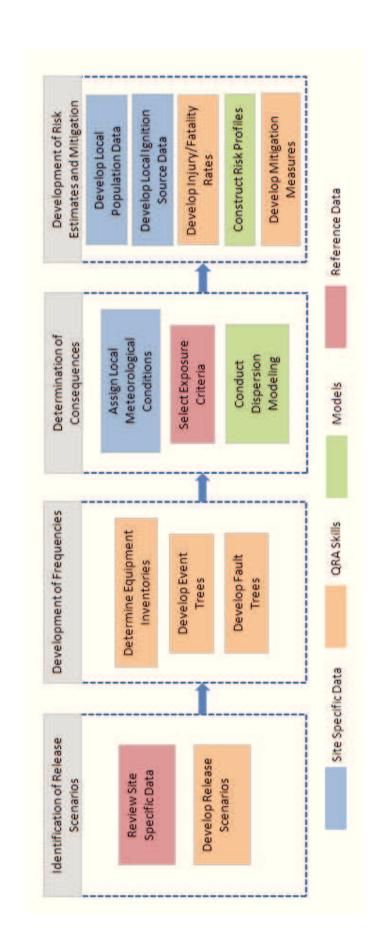
- Identifying release scenarios;
- Developing probabilities of occurrence for each release scenario;
- Determining the consequences of each release scenario;
- Classifying risk significance for the proposed facilities; and
- Developing risk-reducing measures, if necessary.

The approach to each of these tasks is briefly discussed below.

Identify Release Scenarios

Based on the facility drawings and equipment lists for the proposed facilities (or other similar facilities if these are not available), MRS will develop a list of potential release scenarios. The list of release scenarios will be based both of the proposed design and past studies conducted by MRS on similar facilities. These past studies include Process Hazards Analysis studies, which are used to conduct a systematic review of the process equipment by a team of engineers and design experts. MRS has recently conducted extensive QRA analyses on several crude oil transportation facilities including truck loading facilities and marine terminals.

Figure 4-1 Steps Involved in Developing a Quantitative Risk Assessment



Proposal for Preparation of the Phillips SMR Rail Project EIR

<u>Develop Probabilities of Occurrence for Each Release Scenario</u>

MRS will develop probabilities of occurrence for each release scenario using fault trees or a similar method, such as event trees. In developing the failure rates, MRS will use relevant historical failure rate databases. These will be adjusted as needed to reflect the proposed facility operations. External events such as earthquakes will be taken into account in the fault trees.

Evaluating the equipment's operational integrity will be an important step in evaluating the failure rate. All failure rates will be adjusted to account for equipment age using industry data on mean time between failures. A wide variety of sources are available to estimate spill probabilities and environmental impacts. Equipment failure rates from the American Institute of Chemical Engineers (AICHE) Center for Chemical Process Safety (CCPS) will be utilized along with published oil spill data from the Department of Transportation (DOT), California State Fire Marshal (CSFM) and others.

The result of this task will be a set of failure rates for each of the hazard scenarios developed in the first task, including the gas processing unit and releases from drilling operations. These failure rates will be used in the classification of risk for the facilities.

Determine the Consequences of Each Release Scenario

MRS will conduct consequence modeling for each of the release scenarios. The types of consequence modeling will most likely include the following:

- Release rate models;
 - Liquid spill model;
 - Pool model;
- Vapor dispersion models; and
- Thermal radiation model.

Given the relatively low volatility of crude oil and the limited vapor diffusivity of flammable vapors through a crude oil pool, modeling of explosive hazards would not be necessary.

The release rate models will handle multi-component hydrocarbon streams, and they will address the thermodynamic behavior of these multi-component streams. The use of a multi-component spill and pool model results in a more realistic estimate of the limited vapor evolution that would be expected from a crude oil spill, thus avoiding overstating vapor cloud fire hazards and pool ignition probabilities. MRS has prepared modeling simulations for a wide variety of crude oil types and has found that flammable vapors are generally limited to the area immediate above the pool for most heavier crude oil types, thus limiting the probability of delayed ignition due to the downwind dispersion of flammable vapors.

The vapor dispersion models will include heavy and dense gas models, as well as buoyant gas models. The thermal radiation model includes the simultaneous simulation of crude oil spill rate,

pool spreading, multicomponent hydrocarbon vaporization rate and combustion. Thermal radiation emissivity is based on the combustion efficiency of the crude oil pool fire, smoke generation and view factor.

MRS will collect and analyze meteorological data to generate wind roses. This data will be used to select the meteorological conditions used in the consequence analysis and will utilize the CARB meteorological data from the Nipomo-Guadalupe monitoring station, approximately 1 mile southeast of the Proposed Project Site. It is expected that each scenario will be evaluated for two different meteorological conditions.

As part of the consequence analysis, MRS will develop a set of levels of concern (LOC) for each type of hazard. LOC will be developed for toxic exposure, flammable hazards, overpressure hazards, and other types of hazards. The LOC will cover both injury and fatality. For flammable and overpressure hazards, the LOC will address impacts to people as well as equipment and structures. Odor issues will be addressed in the Air Quality section.

The results from the consequence analysis task will be a set of hazard zones for each release scenario. Hazard zones will be developed for each of the meteorological conditions and LOC evaluated.

Develop Risk Estimates

This step in the process will involve developing risk estimates for the facility. These types of risk graphics are a matrix of frequency versus consequence (e.g., injury, fatality).

MRS will consider many factors to develop these risk graphs. The approach for these risk graphs would follow these steps:

- Summarize meteorological data into representative wind direction, wind speed, and stability conditions;
- Select an appropriate grid size and then construct a map using Cartesian coordinates of the site and surrounding area;
- Identify the ignition sources and enter the ignition probabilities on the Cartesian grid;
- Determine the population distribution and then enter the data on the Cartesian grid;
- Select the release events, along with the likelihood of release, consequence data, and release locations;
- Determine the likelihood and consequences of immediate ignition;
- Determine the likelihood and consequences of vapor cloud fires, explosions, and toxic releases, as appropriate for each weather condition;
- Determine the probability of ignition at each point along the path of a dispersing vapor cloud using an ignition algorithm;

- Apply conditional probabilities of fatality or injury for each type of consequence (e.g., thermal exposure, explosion overpressure, toxic exposure); and
- Construct risk graphs by summing the number of fatalities or injuries for each event outcome and plot the results against the frequency.

MRS will determine sensitive population locations through site visits, examining aerial photographs, and consultation with appropriate agencies and the County.

The results of this task will be a set of risk graphics and text that estimate the level of risk associated with the facilities and associated pipelines.

Develop and Rank Risk-Reducing Measures

MRS will develop a set of risk reducing measures for the facility if potentially significant events are identified. The focus will be identifying reducing measures that would serve to reduce the risk associated with events that have a high risk ranking. To the extent possible, the effect of these measures on risk will be quantitatively evaluated and risk graphs will be generated that show the effects of the risk-reducing measures.

Hazardous Material Transportation

Similar to the approach to evaluating facility risk, crude oil transportation will be evaluated to estimate the incremental changes in risk over the current baseline. This will include transportation of crude oil associated with the new rail spur, as well as rail transportation within the County. The crude oil transportation analysis will identify the probability of a spill along the rail corridor, the distribution of crude oil spill volumes, and the areal extent of a typical crude oil spill. The hazards analysis will also look at the safety issues associated with increased rail traffic within the County, including at grade crossings.

4.1.2.8 Land Use and Recreation

This section outlines the scope and approach for the land use and recreation section of the EIR.

General Approach and Methodology

The Land Use and Recreation section will provide detailed information regarding current and historic land uses and recreational resources. In addition, the project will be evaluated for consistency with applicable plans and policies, specifically for physical environmental impacts resulting from inconsistencies, if identified. The focus of the Land Use and Recreation section will be to provide a project-specific analysis of the project's land use conformity, compatibility, and context in a manner both clear to the reader and useful for project reviewers and decision makers. The section will also address impacts to recreational resources, specifically, impacts associated with coastal access, passive and active activities on the dunes and beach areas, and bicycling on State Route 1.

Land Use. A substantial record exists regarding present and historic land uses onsite, including policy and code consistency issues. Pertinent documents include the Phillips 66 Santa Maria Refinery Throughput Increase Project EIR (2012), County staff reports and hearing minutes related to the Throughput Increase project including conditions of approval and policy interpretation, and information from other previous/current permits in effect for the project site/activity. In addition to the previous EIR, SWCA has a substantial library of source material for the immediate area including, but not limited to, the Nipomo Community Park Master Plan Program EIR, Guadalupe Oil Field Restoration Project, DANA Adobe Nipomo Amigos LUO Amendment and CUP EIR. SWCA will conduct a thorough review of all pertinent documentation and will provide a complete background section detailing the site's land use history. The background description will include information regarding past land use issues and the remedies applied.

Combining designations on the overall property include Flood Hazard (FH), Sensitive Resource Area (SRA), Terrestrial Habitat (TH), Local Coastal Program (LCP), and Coastal Appealable Zone (CAZ). The approximately 40-acre area proposed for development is not located within the boundaries of the noted resource designations (FH, SRA, TH). The EIR will include a discussion of consistency with the policies and standards related to these designations, or an explanation regarding applicability based on the intent and boundary of the designation and analysis of potentially-sensitive resources (i.e., special-status species addressed in the Biological Resources section of the EIR). The project is also subject to special use standards identified in CZLUO Section 23.08.094 (Petroleum Refining and Related Industries, and Marine Terminals and Piers), including a requirement for a Specific Plan. At this time, we understand that the project will not result in maximum permitted throughput exceeding 48,950 barrels per day (bpd), and would therefore be exempt from the Specific Plan requirement. This issue will be clarified early in the process and prior to finalization of the EIR Project Description.

To maximize clarity, the impact analysis section will be presented in tabular format, focusing on any land use issue that may present a significant impact on the physical environment. The analysis will evaluate the project's consistency with applicable codes, standards, and policies including measures designed to reduce environmental impacts. To avoid repetition, topical consistency analyses, such as Air Quality, will be addressed in each specific section, and will be referenced in the Land Use and Recreation Section. The assessment will include measures necessary to achieve compliance with applicable codes and policies, and findings regarding residual impact. The tables will be designed to be excerpted for future use by project reviewers and decision makers.

Analysis will include direct, indirect and cumulative impacts. The EIR will reference or identify measures to mitigate potential land use impacts and ensure consistency with the CZLUO, South County Coastal Planning Area Standards, County Coastal Policies, and the Coastal Act.

Recreation. The project site is located east of the Oceano Dunes State Vehicular Recreation Area, Oso Flaco Day Use Area, and Oso Flaco Lake Trail. As measured from the project parcel boundaries, the nearest vertical access points to these resources are approximately 3.6 miles to the north (pedestrian and vehicular [fee required]) and 0.74 mile to the south (pedestrian only). The project does not currently include coastal access improvements; however, this topic will be discussed in relation to consistency with CZLUO Section 23.04.420 (Coastal Access Required), Coastal Policies 2, 5, 8, and 10 (Shoreline Access), and previous permit conditions adopted for DRC2008-00146 (Throughput Project). In addition to access, the discussion will reference information from the Hazards/Hazardous Materials section of the EIR and address potential risks (i.e., spills or accidents) to open space and recreational resources as a result of the proposed project.

Impact Assessment of the Project and Alternatives

The EIR will include a thorough discussion of potential impacts related to land use and recreational resources that could result from the proposed actions. Direct, indirect, and cumulative impacts will be analyzed consistent with criteria set forth by CEQA. Both short- and long-term impacts will be considered. A discussion of residual impacts of the proposed project that are expected to remain after implementation of recommended mitigation measures will be included. Any significant impacts will be reduced to a level of insignificance, where possible, by the application of specific mitigation measures. Mitigation measures to address land use and recreation impacts may include equally effective options to amend or modify the project to attain conformity. The provision of options will allow decision makers and project proponents to tailor the response to consistency impacts. The section will state the residual level of significance resulting after application of the specified measure(s). Cumulative impacts will be evaluated from local and regional perspectives. Development projects approved, pending, or planned for the project area will be considered in the cumulative impact analysis. The County Department of Planning and Building, County Parks, City of Grover Beach, City of Arroyo Grande, City of Pismo Beach, and County of Santa Barbara will be contacted regarding upcoming or proposed projects in the vicinity, and all such projects will be included in the cumulative analysis.

Project alternatives will be individually evaluated and compared in terms of their relative impacts, both deleterious and beneficial, to land use and recreational resources. A discussion of the disadvantages and merits of each alternative will be provided.

4.1.2.9 Noise and Vibration

This section presents the scope and approach for assessing the project and alternative impacts for noise and vibration.

General Approach and Methodology

Transportation and operation activities for the proposed project and alternatives could increase noise levels in the vicinity of the refinery site and along transportation corridors. The noise impact analysis will focus on refinery operations and transportation related noise impacts to communities located near the refinery site and along transportation routes between the refinery site and the rail destinations.

Operational activity noise levels will be calculated based on the equipment lists developed in the project description and a range of literature, including the EPA and the FTA Transit Noise and Vibration Assessments.

Baseline noise levels will rely on the community noise levels developed as part of the San Luis Obispo County Noise Element Technical Reference Document, which defines noise levels at 41 different sites in the County. In addition, recent EIRs which produced community noise monitoring will be utilized to supplement this data. Applicant produced baseline data will be utilized after a peer review to ensure the data was gathered utilizing appropriate protocols.

Impact Assessment of the Project and Alternatives

Noise and vibration generated by operational equipment will be estimated using existing databases on noise and vibration levels as available from the EPA and various other sources, including the FTA associated with rail operations. These noise impacts could be associated primarily with increased rail operations and locomotive noise.

The impact analysis will be based on the relationship between projected noise levels (and the duration of these levels), the baseline noise levels and applicable policies of the San Luis Obispo County Noise Elements. Impact criteria will include the noise/land use compatibility guidelines supplemented by annoyance and sleep disturbance criteria as appropriate.

In addition, as rail traffic levels will be increased along the transportation routes, the increases in noise as a result of increased truck and vehicle traffic will be assessed. Any increases in truck traffic will be assessed using the Federal Highway Administration "Traffic Noise Prediction Model". Community populations with potential exposure to operational or traffic noise will be identified and mapped, including residences and businesses along the transportation routes, and residential and recreational areas.

Calculations will be made to estimate peak and average noise exposure levels (Leq and CNEL) at residences and sensitive receptors. Potential development and the noise impacts from the facilities would be discussed in the cumulative impact section. Mitigation measures to reduce noise impacts, such as transportation corridor modifications or equipment barriers and noise barriers or limits on the timing of operations (no rail loading at night, for example), will be included as needed, to reduce noise levels below the established criteria.

The alternatives analysis will examine the potential impacts associated with the identified alternatives. The noise impacts of the alternatives will be assigned a significance level and will also be compared to those from the proposed project.

4.1.2.10 Population and Housing

This section presents the scope and approach for assessing impacts related to population and housing.

General Approach and Methodology

The project will result in additional temporary or contract employment opportunities. Temporary or contract employment will likely be provided by the current labor pool in the area. Based on information provided by the project proponent in the application materials, on-site staff numbers may increase by approximately 4-6 personnel. The project therefore may result in a small increase in population growth or housing demand. The population and housing section will provide information regarding expected population growth, and resulting severity of impact.

Impact Assessment of the Project and Alternatives

Impacts are not expected to be significant. General information regarding potential employment and population growth will be provided in the EIR. If impacts are significant and adverse, mitigation will be provided to reduce impact severity. Mitigation measures will be applied, if necessary, to reduce impact significance. If payment of fees is part of the mitigation program, the EIR will include information regarding the basis of fees and effectiveness in achieving reductions in impact significance. The EIR will include a discussion of local and regional housing and population trends in the cumulative impact section.

Project alternatives will be individually evaluated and compared in terms of their relative impacts, both deleterious and beneficial, to population and housing. A discussion of the disadvantages and merits of each alternative will be provided.

4.1.2.11 Public Services and Utilities

This section presents the scope and approach for assessing the project and alternative impacts for public services and utilities.

General Approach and Methodology

The public services and utilities section of an EIR typically addresses a suite of local government- and district-provided services, including water supply, wastewater treatment, solid waste disposal, schools, libraries, police and fire protection, and emergency response. This section will analyze increased environmental impacts associated with demand for public services and utilities resulting from the Project. Given the nature of the Project, Water will be addressed in a separate section of the EIR.

The analysis will focus on evaluation of impacts related to fire protection/emergency response resources and wastewater, although impacts related to schools, solid waste facilities, roads, and utilities will also be evaluated. Detailed analysis presented in the Water section of the EIR will be cross-referenced. Baseline information regarding affected service providers and utilities will be summarized. A large amount of relevant data will be obtained from the recently approved

Phillips 66 Throughput EIR. The analysis will utilize relevant and quantifiable significance thresholds and will propose mitigation measures for identified significant impacts.

Impact Assessment of the Project and Alternatives

MRS will review agency and department comments in response to the NOP to clarify anticipated capability and capacity to serve the Project. MRS staff will contact CALFIRE, the Sheriff, and other emergency response and public service/utility providers to solicit additional comment and information where needed. MRS will document all consultation efforts, and incorporate pertinent information.

Fire. Although fire protection services are not expected to increase significantly due to the Project, the analysis of fire protection impacts will include a review of existing services as well as risks resulting from the Project. The analysis will also include a peer review of the Fire Protection and Safety System proposed by the Applicant and included in the Land Use Application, which specifically details a Foam/Water Deluge System, Foam/Water Monitors, and Water Supply System. The section will evaluate whether the Project will have physical environmental impacts which affect public services, or otherwise substantially increase fire risk and emergency response demands on site. Recommended preventative and prescriptive measures to reduce demand on services will be addressed. This may include, but not be limited to, compliance with the Fire Code, access, water storage, and identification of vegetation management/fuel modification areas, if any. The section will evaluate whether the Project will have physical environmental impacts that affect public services, or otherwise substantially increase risk and emergency response demands on site.

Police/Sheriff. Although police protection services are not expected to be impacted by the Project, this section will provide information regarding the County Sheriff's existing facilities and staffing, as well as information regarding other potential responders (e.g., if the Sheriff has a mutual agreement with another jurisdiction). The analysis will incorporate accident and fire risk reduction measures identified in the impact analysis for fire protection services and emergency response.

Roads. This section will primarily reference the detailed analysis provided in the Transportation and Circulation section of the EIR, including proposed and recommended on and off-site road improvements. However, it is anticipated that impacts on public roads would not require new construction and would be less than significant.

Schools. This section will provide general information regarding area schools. The Project is not expected to result in substantial increases in new households with school-age children and, therefore, physical impacts to schools are expected to be less than significant.

Solid Waste. Construction would result in a temporary increase in solid waste generation, including packaging and any excavated material requiring disposal. These wastes would be

removed by the construction contractor and would not result in a need for new solid waste disposal facilities. This section will incorporate and cross-reference information from the Hazards and Hazardous Materials section of the EIR, including anticipated quantities of hazardous materials and proposed transport and disposal.

Wastewater. This section will provide information regarding wastewater generation and disposal. The Project would be served by a new septic system and would not result in increased production of wastewater requiring treatment by a municipal wastewater treatment provider. There would be an increase in wastewater during construction; however, this increase would be limited to the construction period and be hauled by the construction contractor to a fee-based disposal facility. Therefore, impacts on wastewater services and utilities are expected to be less than significant.

Utilities. PG&E and Southern California Gas will provide energy to the Project that is not otherwise produced by the power-generating unit at the Santa Maria Facility. Information regarding onsite utility connections will be outlined in the EIR. This section will summarize anticipated long-term energy use and identify energy conservation measures identified by the Applicant and included in the County Green Building Ordinance.

Mitigation measures will be proposed for each significant impact, if any, which can be incorporated as policies or planning area standards. If mitigation measures consist of fees, the mitigation measure program will specifically outline the basis for fees, as well as timing and other components designed to ensure impacts are reduced to a less than significant level. The analysis will consider the cumulative effects of growth on public service and utility providers. Project alternatives will be individually evaluated and compared in terms of their relative impacts, both adverse and beneficial, to public services. A discussion of the disadvantages and merits of each alternative will be provided.

4.1.2.12 Transportation and Circulation

This section presents the scope and approach for assessing the project and alternative impacts for transportation and circulation.

General Approach and Methodology

MRS will assess transportation impacts by examining worker-related commuter traffic (4-6 new employees), trucks used for delivering construction equipment, trucks used for delivering and hauling construction materials, wastes, exported soil, and trucks used during the ongoing maintenance and operations of the Project. The study area will include roadway networks that could be affected by the Project between the site and the freeways and alternatives as they pertain to construction and operation related traffic.

Transportation impacts would be considered significant if any of the following criteria are met:

- Levels of service on key access routes reduced below level D; or
- Project-related traffic altered stable traffic flows and decreased the overall safety or physical condition of the study area roadways; or
- Increased traffic levels led to localized impacts at sensitive receptors such as schools, hospitals, and day care centers.

A large amount of relevant data will be obtained from the recently approved Phillips 66 Throughput EIR.

Impact Assessment of the Project and Alternatives

MRS will review the Project for impacts to transportation and circulation. The transportation impact analysis for the Project and alternatives will consist of the following tasks:

- Circulation analysis in and around affected Project areas as it pertains to activities associated with construction and operations. This will include determining changes in volume to capacity ratios, levels of service and intersection capacity utilization analysis, as needed.
- Estimate project traffic generation using estimated trips created daily and during the peak hours for each phase of development.
- Research and document other development projects in the study area.
- Determine potential future conditions incorporating other development in the area and ambient growth for three time periods.
- Forecast future year traffic conditions without and with the Project.
- Discuss Project access, internal circulation, and parking requirements.
- Discuss potential construction traffic impacts.

It is anticipated that impacts on public roads would not require new construction and would be less than significant. The temporary increase in vehicular traffic due to construction activities is not anticipated to result in a degradation of public roads or require improvements or expansion of existing public roadways and would, therefore, not result in significant impacts. Project-related traffic will park at the construction site on the existing Phillips 66 property and, therefore, would have no impact on parking.

Mitigation measures will be proposed for each significant impact, if any. The mitigation measure program will specifically outline components designed to ensure impacts are reduced to a less than significant level. The analysis will consider the cumulative impacts associated with the Project and other identified projects recently completed, planned, or reasonably foreseeable in the area. Impacts associated with the Project and alternatives will be presented in a parallel manner, which will allow the relative impacts to be compared. The comparison will identify the environmental benefits and tradeoffs associated with the various alternatives.

4.1.2.14 Water Resources

This section presents the scope and approach for assessing the project and alternative impacts for water resources.

General Approach and Methodology

MRS will review reports prepared for the site and surrounding area to assess the regional and local geologic conditions. Phillips 66 has prepared an Initial Study and Land Use Application, both of which include environmental setting information pertaining to water resources. This information, in addition to baseline information prepared by MRS for the recently completed refinery expansion EIR, will be peered reviewed and incorporated into the environmental setting section, as appropriate. The water supply assessment prepared for the refinery expansion EIR will be reviewed and amended to account for water use increases for the proposed project. Upon compilation and review of relevant information, MRS will write the technical section for the EIR, addressing all water resource issues, potential impacts, and mitigation measures.

The project would require the disturbance of approximately 40 acres, located on relatively flat sandy soils, and could potentially increase rates of soil erosion and sedimentation. However, with the flat topography, high percolation rates of the soils on site, and implementation of construction BMPs, the transport of sediment off-site is expected to be negligible. Onsite water use would increase to provide cooling for the crude oil heating system and six on-site workers. However, the increase would be approximately one percent of the refinery's current water use, and within its water rights per the Judgment on the Santa Maria Groundwater Litigation. Operations of the spur track, with five freights trains of crude oil, will increase the potential for oil spill from train derailment or from the unloading system, which could impact water quality. However, risks of derailment are extremely low, due to the low speed and flat topography on site. The alternative loop configurations would require substantial fill (i.e., up to 448,000 cubic yards), which would increase the potential for slope instability and offsite erosion induced sedimentation into Oso Flaco Creek.

Impact Assessment of the Project and Alternatives

The proposed spur track alignments are located on dune sand on relatively flat to undulating topography, are at least 1,000 feet from the nearest drainage feature, and are located outside the perimeter of the 100-year floodplain, thus minimizing construction related water quality impacts. The operations would be expected to increase the refinery water use by approximately one percent, which would be in compliance with the Judgment after Trial on the Santa Maria Groundwater Litigation.

The criteria that will be used to determine whether the proposed project has the potential for significant water resource impacts will be based on the County of San Luis Obispo Initial Study Checklist. The evaluation will include a discussion of impacts, for both the proposed project and the alternatives, associated with potential violation of water quality standards, erosion, adequate water supply (i.e., groundwater supply), alteration of drainages, increases in runoff, and flooding.

Mitigation measures will be included that could be imposed on the project to minimize potential impacts related to water resources. In the absence of an applicant provided SWPPP, such a plan would be included as a mitigation measure to offset potential erosion related impacts to water quality. Similarly, in the absence of an applicant provided oil spill contingency plan, such a plan would be included as a mitigation measure to offset potential oil spill related impacts. These mitigation measures would likely be applicable to both geological and water resources; therefore, coordination would occur between the two resource areas. MRS will assess the potential cumulative water resource related impacts associated with the proposed project and other identified development projects recently completed, planned, or reasonably foreseeable in the area.

4.2 Study Methodology for the Vertical Coastal Access Project

As part of Development Plan/Coastal Development Permit DRC2008-00146, approved by the San Luis County Board of Supervisors on February 26, 2013, Phillips is required to construct improvements (if required) associated with a vertical public access within or immediately adjacent to an existing maintenance road. At this time, Phillips has not submitted an application to the County for this coastal access, and therefore, the extent of the construction is unknown at this time. Depending upon the level of construction for this coastal access, a Coastal Development Permit may be required.

The proposed coastal access easement study area would be approximately 1.6 miles in length and 200 feet wide. The scope of work includes an assessment of potential environmental impacts that could occur if the existing unpaved access road is developed into public access.

The coastal access portion of the EIR will be done to a programmatic level of detail, and will focus on potential impacts and constraints associated construction and public use of the coastal access. The analysis could then be used by Phillips and the County for developing a final design for the coastal access and to support any additional subsequent environmental review that may be required prior to final approval for the Coastal Access Project. Using this approach will help to assure that the EIR can be completed in the timeframe needed for the Rail Project. MRS is proposing to place the analysis for the Coastal Access Project in a separate chapter in the EIR. This is discussed further in Chapter 5, Document Preparation.

The scope of work for the coastal access portion of the EIR will involve the following major tasks:

- Prepare a Project Description;
- Develop a environmental setting for the study area via document review, peer reviewed Applicant studies, and as needed, field work (this will be done with the baseline section for the Rail Project);

- Assess the impact of the project and identify environmental constrains and possible mitigation measures as needed;
- Assess a range of alternatives to the location and possible design of the coastal access and compare to the proposed project;
- Prepare a Summary Constraints Analysis.

Each of these major tasks is discussed below.

4.2.1 Project Description for the Coastal Access Project

It is our understanding that the Applicant is currently working on developing information for the Coastal Access Project that would include project description information. MRS would use this information to develop a draft project description for this project. The draft would be submitted to the County and the Applicant for review and comment. The information that will be critical for the project description include, a proposed route for the public access, width of the access, construction requirements, the type of public uses that would be allowed, parking location, etc.

As discussed above for the Rail Project, with the accelerated timeline, it is critical that an accurate project description be developed and agreed upon by the County and Applicant early on in the EIR process. This is extremely important since the project description data will serve as the basis for assessing the impacts associated with the Coastal Access Project. As discussed in Chapter 6 (Schedule) of the proposal, work on the project description for the Coastal Access Project would begin after the project description for the Rail Project has been drafted. Throughout the schedule, priority has been given to the analysis of the Rail Project due to the accelerated timeline for completing the EIR.

4.2.2 Develop Environmental Setting for the Coastal Access Project

As discussed above under the Rail Project, the environmental setting for the Coastal Access Project will be developed as part of the Rail Project. The reader is referred to the environmental setting section and issue area discussions for the Rail Project for further information on this task.

4.2.3 Impact Assessment and Constraint/Mitigation Measure Development for the Coastal Access Project

Development of the Coastal Access Project is likely to have potentially significant impacts in only a few key issue areas. In addition, a number of key issues areas, such as biology, are likely to present constraints as to the location and route for the coastal access. As such, the programmatic evaluation of the Coastal Access Project will focus on a few key issue areas. For each of these issue areas the impacts of the project will be identified. For any significant impact, mitigation measures and/or constraints on the final design of the coastal access will be developed. This information from this analysis would be used by the Applicant and the County

in developing a final design for the Coastal Access Project and any associated supplemental environmental review.

The impact approach to key of the key issue areas is briefly discussed below.

Aesthetics

Depending upon the type and extent of the access proposed there is the potential for aesthetic impacts during construction. However, these would be short-term. If the access was designed for motor vehicles and parking was provided near the beach, then there could be long-term aesthetic impacts. The analysis will primarily focus on aesthetic impacts to the surround beach and dune complex. Similar to the scope of work for the project, MRS will assess the aesthetic impacts of the Coastal Access Project, and develop mitigation measures and identify and constrains that could affect the final design of the Coastal Access Project.

Air Quality/Greenhouse Gases

Air emissions could be generated from the construction of the coastal access, as well as from traffic coming to use the access. If the access is available to recreational vehicles, then there would be additional air emissions. It is our understanding that the Applicant's consultant, Arcadis, is currently developing air emission estimates for the Coastal Access Project. These emission estimates would be peer reviewed and supplemented in needed. The impact analysis would include estimates of the construction and operational emissions for the Coastal Access Project including traffic emission for visitors. If significant impacts are identified, then mitigation measures would be developed. Air quality/GHG constrains that could affect the final design of the Coastal Access Project will also be identified.

Biological Resources

It is our understanding that the applicant's consultant, Arcadis, is currently conducting biological surveys (botanical and wildlife) within the proposed easement study area. SWCA will peer review the submitted reports, conduct a field verification survey, and prepare the impact analysis. The proposed easement would be located within areas designated as Terrestrial Habitat (TH), a Local Coastal Program Environmental Sensitive Habitat (ESHA) designation, which will require a determination of consistency with the LCP, Coastal Policies, the Coastal Act, and adoption of findings by County decision-makers. The EIR analysis will include substantial evidence that can be used to support a consistency recommendation and draft findings for the County's consideration. For any significant biology impacts, mitigation measures would be developed, and constrains that could affect the final design of the Coastal Access Project will also be identified.

Cultural Resources

It is our understanding that the Applicant's consultant, Arcadis, is currently conducting a cultural resource survey within the proposed easement study area. Similar to the scope of work for the project, SWCA will conduct a peer review and field reconnaissance as part of the environmental

analysis. As needed, mitigation measures would be developed and constrains that could affect the final design of the Coastal Access Project will also be identified.

Geological Resources

Placement of a coastal access through dunes can have geological impacts as it relates to coastal geomorphology. Sand dunes can be very dynamic resulting in shifting sands, which could impact the coastal access right-of-way. This could be particularly significant if the access was designed for recreational vehicles. Impacts from shifting sands on the coastal access right-of-way will be qualitatively evaluated. If needed, mitigation measures will be developed, and constrains that could affect the final design of the Coastal Access Project will be identified.

Land Use and Recreation

The easement would traverse two land use designations, Industrial on the east side of the railway and Open Space to the west. The proposed easement would provide new vertical access from State Route 1 to the Oceano Dunes State Vehicular Recreation Area. The environmental analysis will include a preliminary recommendation for consistency with plans, policies, and standards, and address potential physical impacts or land use incompatibilities (i.e. proximity to farmland, impacts to sensitive biological resources). The analysis will also identity any land use constraints that may exist with the coastal access project.

Transportation and Circulation

The development of the Coastal Access Project would result in increased traffic in the area due to use of the access. There are also parking impact associated with the opening up of a new coastal access point. Traffic could be generated during the construction of the coastal access. These traffic impacts would be assessed following the same methodology described for the Rail Project. For any significant traffic impacts, mitigation measures would be developed and constrains that could affect the final design of the Coastal Access Project will also be identified.

4.2.4 Alternatives Analysis for Coastal Access Project

A screening level alternatives analysis will be conducted for the Coastal Access Project. The types of alternatives could include alternative locations for the coastal access, alternative types of access use, alternative right-of-way widths, etc. Each of the identified alternatives will be screened against the Coastal Access Project using the alternative screening methodology described above for the Rail Project. The results of the screening analysis will be a comparative summary of the level and type of impacts between each alternative and the proposed Coastal Access Project.

4.2.5 Summary Constraints Analysis for the Coastal Access Project

The Chapter on the Coastal Access Project will contain a section that discuss any constraints that may have been identified in each issue area, and possible measures that could be used to eliminate or avoid the constraint. This information should help the Applicant and the County in

developing the final design for the Coastal Access Project, and in conducting any supplemental environmental review.

6.0 Project Schedule

This section of the proposal provides a schedule for the project and lists the proposed deliverables to the County. The County has requested an expedited timeline for the preparation of this EIR. The Project needs to be taken to the Planning Commission in early April 2014. This means that the Final EIR must be delivered to the County in early March 2014. Given the fixed CEQA times for review of the Public Draft, the Administrative Draft must be delivered to the County by the end of September 2013. Due to the compressed timeline, a lot of work has gone into preparing the project schedule to assure that the requested timeline can be met.

The focus of the schedule has to been to assure that adequate time was allotted to the rail project, since this is the project that is driving the accelerated timeline. All of the upfront work is driven by the Rail Project. Once the major tasks associated with the Rail Project are well underway, work on the Vertical Coastal Access Project would begin, with the two projects coming together at the Administrative Draft stage of the EIR process.

The remaining sections of this Chapter present a detailed project schedule, along with a discussion of the basis for the proposed time frame. The schedule shows all the proposed deliverables for the project.

6.1 Proposed Schedule

The project schedule in Figure 6-1 provides a comprehensive indication of the organization and preparation that has been given to the management plan and to assuring that the accelerated timeline is met. All relevant project milestones and deadlines have been identified. The schedule shows the allotting time for fieldwork and analysis, document writing, as well as County and Applicant review of draft documents. Table 6-1 lists the key milestone dates from the proposed schedule.

Table 6-1 Key Milestone Dates	
Milestone	Date
Draft EIR Style Guide to County for Review	June 27, 2013
Draft Project Description to County and Applicant for Review	July 12, 2013
Draft Cumulative Project Descriptions to County for Review	July 19, 2013
Draft Environmental Setting Sections to County for Review	August 2, 2013
Draft Alternative Descriptions to County and Applicant for	August 1, 2013
Review	
Draft Coastal Access Project Description to County and	August 5, 2013
Applicant for Review	
Administrative Draft EIR to County for Review	September 30, 2013
Release of Public Draft EIR (45-day public comment period)	November 5, 2013
Administrative Final EIR and Response to Comments to	January 22, 2014
County for Review	
Final EIR to County	February 24, 2014

A critical item in the project's success is management and control, assuring that tasks are completed on time and that the appropriate information is transferred to the dependent tasks. The management tools described in Section 3.0, Key Personnel and Project Management will ensure that work tasks are accomplished in the appropriate order and that critical information is effectively transferred to any dependent tasks.

The schedule in Table 6-1 estimates various lengths of time for County reviews of the deliverables. These review times have been reduced from what has been typical on past projects due to the accelerated timeline.

The schedule has also identified key places where the Applicant will need to review the various project and alternative descriptions. Given the accelerated timeline it is critical that that the County and EIR consultant work with the Applicant to assure that the project descriptions are accurate and reflect the Applicant's project.

MRS has also accelerated delivery of the environmental setting portion of the document for County review. This will occur prior to the Administrative Draft EIR. This will reduce the work load on the County in reviewing the Administrative Draft, and will allow MRS to complete the environmental setting portion of the document early in the process, thereby allowing for a faster turnaround on the Administrative and Public Draft EIR.

6.2 Project Deliverables

In developing the proposed schedule, considerable thought was given to providing the County with draft work products for review throughout the course of the project. This approach serves a number of useful purposes. First, the County has an early opportunity to review work products and to comment on format and structure; those comments will then be incorporated into future deliverables. Second, this approach allows the County to actively participate in the development of the project documents. Third, it assures that the final work product is a collaboration between MRS and the County. Table 6-2 lists key deliverables, proposed due dates, and the duration of the County review period.

Table 6-2 List of Deliverables, Proposed Due Dates, and Duration of County Review Period

Milestone	Date	Estimated County Review Period (work days)
Draft EIR Style Guide	June 27, 2013	5
Draft Project Description	July 12, 2013	7
Revised Project Description	July 30, 2013	4
Draft Cumulative Project Descriptions	July 19, 2013	5
Draft Environmental Setting Sections	August 2, 2013	10
Draft Coastal Access Project Description	August 5, 2013	5

Table 6-2 List of Deliverables, Proposed Due Dates, and Duration of County Review Period

Milestone	Date	Estimated County Review Period (work days)
Administrative Draft EIR	September 30, 2013	10
Camera Ready Public Draft EIR	October 29, 2013	3
Administrative Final EIR and Response to Comments	January 22, 2014	10
Camera Ready Final EIR	February 14, 2014	3

Figure 6-1 Phillips SMR Rail Project EIR Schedule

Exhibit B

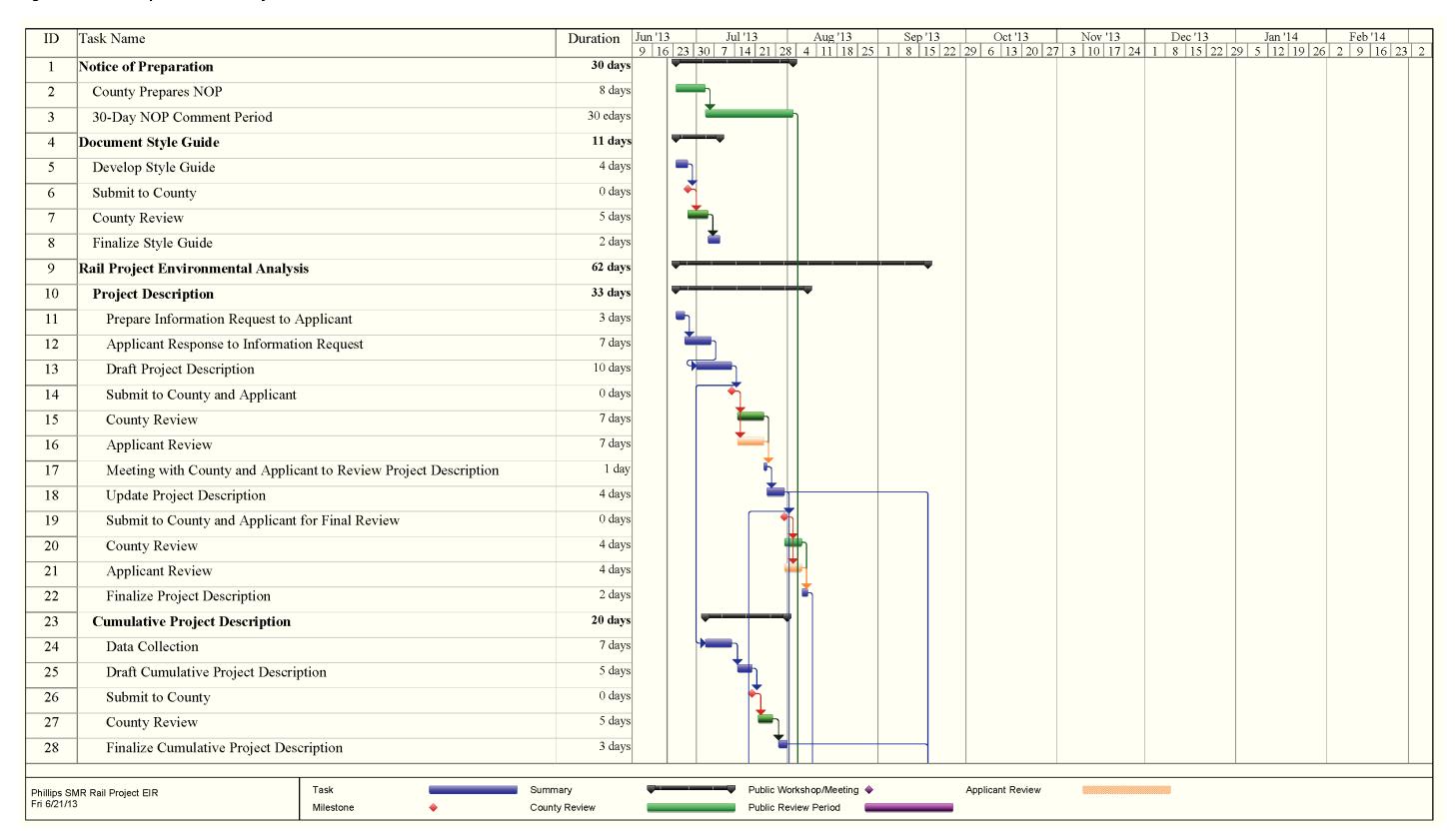


Exhibit B

Page 62 of 79

Figure 6-1 Phillips SMR Rail Project EIR Schedule (con't)

29 30 31 32 33	Environmental Setting Peer Review/Data Collection/Field Work	45 day	9	16 23	30 7	141211	781/									0 1 1 0 1 1				7U 1 5 1		11719	
31			/S			11,21	20 4	11 1	18 23	1 7	8 15	22 2	29 6	13 20) 27	Nov '1 3 10 1	.7 24	1 8	13 44	29 3 .	12 19 2	7 2 1 2	10 23
32		15 day	rs																				
	Draft Environmental Setting	15 day	rs		†																		
33	Submit to County	0 day	rs																				
	County Review	10 day	rs					— <u> </u>															
34	Finalize Environmental Setting Sections	5 day	'S					\	-		\dashv												
35	Impact/Mitigation Assessment	35 day	'S					-			—												
36	Project Impact/Mitigation Assessment	35 day	rs																				
37	Cumulative Impact Mitigation Assessment	5 day	rs																				
38	Alternatives Analysis	42 day	/S			-					- 												
39	Draft Alternative Descriptions	9 day	rs			-																	
40	Submit to County and Applicant for Review	0 day	'S																				
41	County Review	5 day	rs					h															
42	Applicant Review	5 day	's																				
43	Finalize Alternative Descriptions	3 day	rs					—															
44	Conduct Alternative Screening Analysis	5 day	rs					*		h													
45	Alternative Impact/Mitigation Assessment	10 day	rs							*													
46	Environmentally Superior Alternative Analysis	3 day	rs																				
47	Vertical Coastal Access Project Environmental Analysis	32 day	'S				-																
48	Draft Project Description	5 day	rs					ή															
49	Submit to County and Applicant for Review	0 day	rs				4	•															
50	County Review	5 day	'S																				
51	Applicant Review	5 day	'S																				
52	Finalize Project Description	3 day	rs					*															
53	Project Impact/Mitigation Assessment	15 day	rs																				
54	Assess Alternatives	15 day	'S						4														
55	Develop Constraints Analysis Summary	5 day	'S																				
56	Administrative Draft EIR	19 day	'S											—									
	IR Rail Project EIR Task	Summary				D. Inter	\A(arll-	op/Meet	lina A				A m w 1:	nt Revie									

Exhibit B

Figure 6-1 Phillips SMR Rail Project EIR Schedule (con't)

ID	Task Name	Duration Jun'13 Jul'13 Aug'13 Sep'13 Oct'13 Nov'13 Description 9 16 23 30 7 14 21 28 4 11 18 25 1 8 15 22 29 6 13 20 27 3 10 17 24 1 8	ec '13
57	Finalize Draft Sections of EIR	9 days	
58	Submit to County	0 days	
59	County Review	10 days	
60	Public Draft EIR	19 days	
61	Finalize Public Draft EIR	10 days	
62	Submit to County	0 days	
63	County Review of Camera Ready Copy	3 days	
64	Print Public Draft EIR	3 days	
65	Deliver Public Draft EIR to County and State Clearinghouse	0 days	
66	County Distribute Draft EIR	3 days	
67	Public Comment Period	33 days	-
68	Start of 45-Day Public Comment Period	0 days	
69	45-Day Public Comment Period	45 edays	—]
70	Public Workshop on Public Draft EIR	0 days	
71	Draft EIR Public Comment Meeting	0 days	⊶
72	Close of Public Comment Period	0 days	*
73	Administrative Final EIR	30 days	
74	Review and Assign Responsibility for Comments	4 days	
75	Draft Response to Comments	16 days	
76	Edit Public Draft EIR	10 days	
77	Submit to County	0 days	*
78	County Review	10 days	
79	Final EIR	13 days	
80	Finalize EIR	6 days	
81	Submit to County	0 days	<u> </u>
82	County Review of Camera Ready Copy	3 days	<u> </u>
83	Print Final EIR	4 days	<u> </u>
84	Release Final EIR	0 days	*
illips SN 6/21/13	MR Rail Project EIR Millestone	mmary Public Workshop/Meeting ♦ Applicant Review unty Review Public Review Period	,

Exhibit B

7.0 Cost Quotation and Budget Summary

MRS proposes to perform, on a best efforts basis, the work described in the accompanying technical proposal for a cost of \$367,322. This cost includes professional services and expenses. The fixed costs for the EIR are \$308,089. The time and material budgets are as follows:

- 1. County Meetings \$41,588,
- 2. Hearings \$14,025, and
- 3. CEQA Findings \$3,619.

The fixed costs for the Rail Project EIR are \$235,386. The fixed costs for the programmatic analysis of the Coastal Access Project are \$72,703. Table 7-1 summarizes the fixed costs for the two projects by issue area and major task. These costs are in addition to the Purchase Order that will be issued by the County to begin work on this project prior to the contract going to the Board of Supervisors.

All of the time and material costs (County meeting, hearings and CEQA finding) have been included with the Rail Project, since these tasks would be essentially the same with or without the Coastal Access Project. Table 7-2 and 7-3 provides a detailed breakdown of the costs by issue area and major task for the Rail Project and Coastal Access Project respectively.

The cost estimates include all activities associated with development of an EIR as discussed in Section 4 of the proposal. The estimated costs for the project rely on the following major assumptions.

- Field work will be limited to what is described in Section 4 of the proposal.
- The Applicant prepared technical studies will be complete enough to not require any substantial additional field work.
- Attendance by various team members at four (4) meetings with the County.
- Attendance of two (2) staff at the weekly conference calls with the County and Applicant.
- Attendance of various team members at two (2) public hearings (one (1) Planning Commission and one (1) Board of Supervisor hearing.
- Attendance by various team members at one NOP scoping hearing.
- Attendance by various team members at two public meeting on the Draft EIR.
- The Public Draft EIR will be 300 pages (not including the Technical Appendices).
- The Final EIR will be 350 pages (not including the Technical Appendices).
- 150 comments will be addressed as part of the Response to Comments, and no new analysis will be required as a result of the comments received on the Public Draft EIR.
- 25 hard copies of the Public Draft EIR will be delivered to the County, along with three (3) hard copies of the Technical Appendices, and 40 hard copies of the Executive

- Summary (all hard copies will have CDs). MRS will also provide up to 50 copies of the PDEIR on CD to the County.
- 25 copies of the Final EIR will be delivered to the County, along with three (3) hard copies of the Technical Appendices, and 20 hard copies of the Executive Summary (all hard copies will have CDs). MRS will also provide up to 50 copies of the PDEIR on CD to the County.

Objectivity

Neither MRS, nor any of the members of the project team, has been hired by the Applicant to assist in the preparation of materials directly related to any component of the proposed project. No member of the contractor's team has a financial gain or an interest in the final outcome of the project. MRS hereby certifies that MRS and its subcontractors have the capacity to submit a neutral and unbiased environmental document.

MRS has reviewed the County Contract and finds all of the provisions acceptable.

Table 7-1 Fixed Price Cost Summary

	Rail	Rail Project	Vertical C	Vertical Coastal Access	Total EII	Total EIR Fixed Costs
Issue Area	Hours	Costs	Hours	Costs	Hours	Costs
Direct Labor						
A. Project Description/Alternative Screening	64	\$12,640	36	096'98	100	\$19,600
B. Aesthetics	40	\$6,000	22	\$3,300	62	\$9,300
C. Agricultural Resources	09	\$6,640	ł	1	09	\$6,640
D. Air Quality/Greenhouse Gases	106	\$19,600	28	\$5,040	134	\$24,640
E. Biological Resources	148	\$19,496	74	\$9,926	222	\$29,423
F. Cultural Resources	58	\$5,925	50	\$5,194	108	\$11,119
G. Geological Resources	68	\$12,078	39	\$5,346	128	\$17,424
H. Hazards and Hazardous Materials	92	\$15,200	ł	1	9/	\$15,200
I. Land Use and Recreation	93	\$10,000	61	\$6,577	154	\$16,577
J. Noise and Vibration	89	\$12,240	ł	1	89	\$12,240
K. Population and Housing	31	\$3,358	ł	-	31	\$3,358
L. Public Services and Utilities	64	\$10,800	ł	1	64	\$10,800
M. Transportation and Circulation	38	\$6,840	26	\$4,680	64	\$11,520
N. Water Resources	102	\$13,112	ł	-	102	\$13,112
O. Document Preparation and QA/QC	348	\$51,840	126	\$17,880	474	\$69,720
P. Project Management	110	\$19,400	40	\$7,200	<u>150</u>	\$26,600
Total Direct Labor	1,495	\$225,169	502	\$72,104	1,997	\$297,273
		510 217		0020	1	210 010
Other Direct Costs		310,217		0000	•	\$10,610
Total Costs		\$235,386		\$72,703		\$308,089

Proposal for Preparation of the Phillips SMR Rail Project EIR

Proposal for Preparation of the Phillips SMR Rail Project EIR

Table 7-2 Detailed Cost Estimate for the Phillips SMR Rail Project EIR

Key Staff	Rate		t Description tives Analysi		is trat EIR	ive Draft	Publ	ic Dra	aft EIR	Re	is trati EIR spons		F	inal E	IR		lic/ Co leeting	-	Н	learing	ţ\$	CEQ	A Fin	dings		Total
	(\$/hr)	Hours	Cost	Hours		Cost	Hours		Cost	Hours		Cost	Hours	(Cost	Hours	C	ost	Hours	(Cost	Hours		Cost	Hours	Cost
<u>Direct Labor</u>																										
A. Project Description/Alternative Screening																										
John Peirson	\$220.00	20	\$ 4,400	0	\$	-	4	\$	880	4	\$	880	0	\$	-	0	\$	-	0	\$	-	0	\$	-	28	\$ 6,160
Greg Chittick	\$180.00	<u>20</u>	\$ 3,600	0	\$	<u> </u>	<u>8</u>	\$	1,440	<u>8</u>	\$	1,440	<u>0</u>	\$	-	<u>40</u>	\$	7,200	<u>0</u>	\$	<u>-</u>	<u>0</u>	<u>\$</u>	<u>-</u>	<u>76</u>	\$ 13,680
Total Issue Area		40	\$ 8,000	0	\$	-	12	\$	2,320	12	\$	2,320	0	\$	-	40	\$	7,200	0	\$	-	0	\$	-	104	\$ 19,840
B. Aes thetics																										
Michael Cassata	\$150.00	<u>4</u>	\$ 600	<u>24</u>	<u>\$</u>	3,600	<u>4</u>	\$	600	<u>8</u>	\$	1,200	<u>0</u>	<u>\$</u>		<u>0</u>	\$		<u>0</u>	\$	<u>-</u>	<u>0</u>	<u>\$</u>		<u>40</u>	\$ 6,000
Total Issue Area		4	\$ 600	24	\$	3,600	4	\$	600	8	\$	1,200	0	\$	-	0	\$	-	0	\$	-	0	\$	-	40	\$ 6,000
C. Agricultural Resources																										
Shawna Scott	\$139.70	2	\$ 279	4	\$	559	2	\$	279	2	\$	279	2	\$	279	0	\$	-	0	\$	-	0	\$	_	12	\$ 1,676
Emily Creel	\$102.30	8	\$ 818	22	\$	2,251	6	\$	614	6	\$	614	2	\$	205	0	\$	-	0	\$	-	0	\$	_	44	\$ 4,501
Adriana Neal	\$115.50	<u>0</u>	<u>\$</u> -	4	\$	462	<u>0</u>	<u>\$</u>	<u>-</u>	<u>0</u>	\$		<u>0</u>	\$	_	<u>0</u>	\$		<u>0</u>	\$		<u>0</u>	\$		4	<u>\$ 462</u>
Total Issue Area		10	\$ 1,098	30	\$	3,271	8	\$	893	8	\$	893	4	\$	484	0	\$	-	0	\$	-	0	\$	-	60	\$ 6,640
D. Air Quality/Greenhouse Gases																										
Greg Chittick	\$180.00	0	\$ -	40	\$	7,200	16	\$	2,880	16	\$	2,880	8	\$	1,440	8	\$	1,440	16	\$	2,880	0	\$	_	104	\$ 18,720
Steve Radis	\$200.00	<u>0</u>	<u>\$</u>	<u>8</u>	\$	1,600	<u>8</u>	\$	1,600	<u>6</u>	\$	1,200	<u>4</u>	\$	800	<u>0</u>	\$	<u>-</u>	<u>0</u>	\$	<u> </u>	<u>0</u>	<u>\$</u>	<u> </u>	<u>26</u>	\$ 5,200
Total Issue Area		0	\$ -	48	\$	8,800	24	\$	4,480	22	\$	4,080	12	\$	2,240	8	\$	1,440	16	\$	2,880	0	\$	-	130	\$ 23,920
E. Biological Resources																										
Jon Claxton	\$139.70	10	\$ 1,397	32	\$	4,470	16	\$	2,235	24	\$	3,353	4	\$	559	8	\$	1,118	16	\$	2,235	0	\$	_	110	\$ 15,367
Travis Belt	\$127.60	0	\$ -	32	\$	4,083	4	\$	510	8	\$	1,021	0	\$	-	0	\$	-	0	\$	-	0	\$	_	44	\$ 5,614
Jaimie Jones	\$102.30	0	\$ -	8	\$	818	<u>4</u>	\$	409	<u>4</u>	\$	409	0	\$	-	0	\$	-	0	\$	-	0	\$	-	16	\$ 1,637
Adriana Neal	\$115.50	<u>0</u>	<u>s -</u>	<u>2</u>	<u>\$</u>	231	<u>0</u>	<u>\$</u>	<u>-</u>	<u>0</u>	\$	<u>-</u>	<u>0</u>	\$	_	<u>0</u>	\$	<u>-</u>	<u>0</u>	\$	<u>-</u>	<u>0</u>	<u>\$</u>		<u>2</u>	<u>\$ 231</u>
Total Issue Area		10	\$ 1,397	74	\$	9,603	24	\$	3,155	36	\$	4,783	4	\$	559	8	\$	1,118	16	\$	2,235	0	\$	-	172	\$ 22,849
F. Cultural Resources																										
Shawna Scott	\$139.70	2	\$ 279	4	\$	559	2	\$	279	2	\$	279	2	\$	279	0	\$	-	0	\$	-	0	\$	-	12	\$ 1,676
Leroy Laurie	\$91.30	4	\$ 365	32	\$	2,922	2	\$	183	4	\$	365	2	\$	183	0	\$	-	0	\$	-	0	\$	_	44	\$ 4,017
Adriana Neal	\$115.50	<u>0</u>	<u>\$</u>	<u>2</u>	<u>\$</u>	231	<u>0</u>	<u>\$</u>		<u>0</u>	\$		<u>0</u>	\$	_	<u>0</u>	\$		<u>0</u>	\$	<u>-</u>	<u>0</u>	\$	<u>-</u>	<u>2</u>	\$ 231
Total Issue Area		6	\$ 645		\$	3,711	4	\$	462	6	\$	645	4	\$	462	0	s	-	0	s	-	0	\$	-	58	\$ 5,925

Page 70 of 79

Exhibit B

Table 7-2 Detailed Cost Estimate for the Phillips SMR Rail Project EIR (con't)

Key Staff	Rate	Project Alternat	t Descri tives An	_	Admini	s trati EIR	ve Draft	Publ	ic Dra	ıft EIR	Res	is trati EIR spons omme	e to	F	inal E	IR		lic/ Cor leeting		Н	learing	gs	CEQ)A Fin	dings		Total
	(\$/hr)	Hours	Co	ost	Hours	(Cost	Hours		Cost	Hours		Cost	Hours	(Cost	Hours	C	Cost	Hours	(Cost	Hours		Cost	Hours	Cost
G. Geological Resources																											
Perry Russell	\$148.50	4	\$	594	40	\$	5,940	8	\$	1,188	8	\$	1,188	6	\$	891	8	\$	1,188	0	\$	-	0	\$	-	74	\$ 10,989
Cay Fitzgerald	\$99.00	2	\$	198	8	\$	792	0	\$	-	6	\$	594	0	\$	-	0	\$	-	0	\$	-	0	\$	-	16	\$ 1,584
Courtney Kestler	\$99.00	<u>0</u>	\$		<u>4</u>	<u>\$</u>	396	<u>0</u>	\$	<u>-</u>	<u>2</u>	<u>\$</u>	198	<u>1</u>	\$	99	<u>0</u>	\$	<u>-</u>	<u>0</u>	\$		<u>0</u>	\$		<u>7</u>	\$ 693
Total Issue Area		6	\$	792	52	\$	7,128	8	\$	1,188	16	\$	1,980	7	\$	990	8	\$	1,188	0	\$	-	0	\$	-	97	\$ 13,266
H. Hazards and Hazardous Materials																											
Steve Radis	\$200.00	<u>4</u>	<u>\$</u>	800	<u>40</u>	<u>\$</u>	8,000	<u>8</u>	<u>\$</u>	1,600	<u>16</u>	\$	3,200	<u>8</u>	\$	1,600	<u>0</u>	\$	-	<u>0</u>	\$	<u>-</u>	<u>0</u>	\$		<u>76</u>	<u>\$ 15,200</u>
Total Issue Area		4	\$	800	40	\$	8,000	8	\$	1,600	16	\$	3,200	8	\$	1,600	0	\$	-	0	\$	-	0	\$	-	76	\$ 15,200
I. Land Use and Recreation																											
Shawna Scott	\$139.70	2	\$	279	4	\$	559	4	\$	559	2	\$	279	1	\$	140	16	\$	2,235	16	\$	2,235	0	\$	-	45	\$ 6,287
Emily Creel	\$102.30	<u>6</u>	<u>\$</u>	614	<u>46</u>	<u>\$</u>	<u>4,706</u>	<u>16</u>	<u>\$</u>	1,637	<u>10</u>	\$	1,023	<u>2</u>	\$	205	<u>0</u>	\$		<u>0</u>	\$		<u>0</u>	\$		<u>80</u>	<u>\$ 8,184</u>
Total Issue Area		8	\$	893	50	\$	5,265	20	\$	2,196	12	\$	1,302	3	\$	344	16	\$	2,235	16	\$	2,235	0	\$	-	125	\$ 14,471
J. Noise and Vibration																											
Greg Chittick	\$180.00	<u>4</u>	<u>\$</u>	720	<u>40</u>	<u>\$</u>	7,200	<u>8</u>	<u>\$</u>	1,440	<u>12</u>	\$	2,160	<u>4</u>	\$	720	<u>0</u>	\$	<u>-</u>	<u>0</u>	\$	<u> </u>	<u>0</u>	\$	<u>-</u>	<u>68</u>	<u>\$ 12,240</u>
Total Issue Area		4	\$	720	40	\$	7,200	8	\$	1,440	12	\$	2,160	4	\$	720	0	\$	-	0	\$	-	0	\$	-	68	\$ 12,240
K. Population and Housing																											
Shawna Scott	\$139.70	1	\$	140	1	\$	140	1	\$	140	1	\$	140	1	\$	140	0	\$	-	0	\$	-	0	\$	-	5	\$ 699
Emily Creel	\$102.30	<u>4</u>	<u>\$</u>	409	<u>16</u>	<u>\$</u>	1,637	<u>2</u>	<u>\$</u>	205	<u>2</u>	\$	205	<u>2</u>	\$	205	<u>0</u>	\$		<u>0</u>	\$	<u> </u>	<u>0</u>	\$		<u>26</u>	<u>\$ 2,660</u>
Total Issue Area		5	\$	549	17	\$	1,777	3	\$	344	3	\$	344	3	\$	344	0	\$	-	0	\$	-	0	\$	-	31	\$ 3,358
L. Public Services and Utilities																											
Greg Chittick	\$180.00	4	\$	720	24	\$	4,320	4	\$	720	8	\$	1,440	0	\$	-	0	\$	-	0	\$	-	0	\$	-	40	\$ 7,200
Michael Cassata	\$150.00	<u>2</u>	<u>\$</u>	300	<u>16</u>	<u>\$</u>	2,400	<u>4</u>	<u>\$</u>	600	<u>2</u>	\$	300	<u>0</u>	<u>\$</u>		<u>0</u>	<u>\$</u>		<u>0</u>	\$	<u> </u>	<u>0</u>	\$		<u>24</u>	\$ 3,600
Total Issue Area		6	\$	1,020	40	\$	6,720	8	\$	1,320	10	\$	1,740	0	\$	-	0	\$	-	0	\$	-	0	\$	-	64	\$ 10,800
M. Transportation and Circulation																											
Greg Chittick	\$180.00	<u>4</u>	\$	720	<u>24</u>	<u>\$</u>	4,320	<u>4</u>	<u>\$</u>	720	<u>4</u>	\$	720	<u>2</u>	<u>\$</u>	360	<u>0</u>	\$	<u> </u>	<u>0</u>	\$	<u>-</u>	<u>0</u>	\$		<u>38</u>	<u>\$ 6,840</u>
Total Issue Area		4	\$	720	24	\$	4,320	4	\$	720	4	\$	720	2	\$	360	0	\$	-	0	\$	-	0	\$	-	38	\$ 6,840

Page 72 of 79

Page 73 of 79

Table 7-2 Detailed Cost Estimate for the Phillips SMR Rail Project EIR (con't)

Key Staff	Rate		Description iwes Analysis		is trative EIR	Draft	Publi	c Draf	t EIR	Res	strative Fin EIR ponse to mments	al	Fin	ial EIR		ic/ County eetings	Н	learing	gs	CEQ	A Fin	dings		Total
	(\$/hr)	Hours	Cost	Hours	Co	ost	Hours	(Cost	Hours	Cost	Hot	ırs	Cost	Hours	Cost	Hours	(Cost	Hours		Cost	Hours	Cost
N. Water Resources																								
Perry Russell	\$148.50	4	\$ 594	16	\$	2,376	4	\$	594	6	\$ 8	91 2		\$ 297	8	\$ 1,188	16	\$	2,376	0	\$	-	56	\$ 8,316
Cay Fitzgerald	\$99.00	0	\$ -	8	\$	792	0	\$	-	2	\$ 1	98 0		\$ -	0	\$ -	1	\$	99	1	\$	99	12	\$ 1,188
Joel Degner	\$126.50	2	\$ 253	32	\$	4,048	4	\$	506	10	\$ 1,2	65 4		\$ 506	8	\$ 1,012	0	\$	-	0	\$	-	60	\$ 7,590
Courtney Kestler	\$99.00	<u>0</u>	<u>\$ -</u>	4	\$	396	<u>0</u>	\$		<u>2</u>	<u>\$</u> 1	<u>98</u> <u>2</u>		<u>\$ 198</u>	<u>0</u>	<u>\$</u>	<u>0</u>	\$		<u>0</u>	<u>\$</u>		<u>8</u>	<u>\$ 792</u>
Total Issue Area		6	\$ 847	60	\$ 7	7,612	8	\$	1,100	20	\$ 2,5	52 8		\$ 1,001	16	\$ 2,200	17	\$	2,475	1	\$	99	136	\$ 17,886
O. Document Preparation and QA/QC																								
John Peirson	\$220.00	4	\$ 880	24	\$	5,280	20	\$	4,400	20	\$ 4,4	00 10	5	\$ 3,520	0	\$ -	0	\$	-	0	\$	_	84	\$ 18,480
Bonnie Luke	\$140.00	0	\$ -	24	\$	3,360	24	\$	3,360	16	\$ 2,2	40 20)	\$ 2,800	0	\$ -	0	\$	-	0	\$	-	84	\$ 11,760
Brittney Stevens	\$120.00	<u>16</u>	<u>\$ 1,920</u>	<u>68</u>	\$	8,160	<u>32</u>	\$	3,840	<u>32</u>	\$ 3,8	<u>40</u> <u>32</u>	2	\$ 3,840	<u>0</u>	<u>\$</u> -	<u>0</u>	\$		<u>0</u>	\$	_	<u>180</u>	\$ 21,600
Total Document Preparation and QA/QC		20	\$ 2,800		\$ 16	6,800	76	\$	11,600	68	\$ 10,4	80 68	3	\$ 10,160	0	\$ -	0	\$	-	0	\$	-	348	\$ 51,840
P. Project Management																								
John Peirson	\$220.00	4	\$ 880	24	\$	5,280	10	\$	2,200	16	\$ 3,5	20 8		\$ 1,760	112	\$ 24,640	16	\$	3,520	16	\$	3,520	206	\$ 45,320
Brittney Stevens	\$120.00	<u>0</u>	<u>s -</u>	<u>28</u>	\$	3,360	<u>8</u>	\$	<u>960</u>	<u>8</u>	<u>\$</u> 9	<u>60 4</u>		<u>\$ 480</u>	<u>0</u>	<u>s -</u>	<u>0</u>	\$		<u>0</u>	\$		<u>48</u>	<u>\$ 5,760</u>
Total Program Management		4	\$ 880	52	\$ 8	8,640	18	\$	3,160	24	\$ 4,4	30 12	2	\$ 2,240	112	\$ 24,640	16	\$	3,520	16	\$	3,520	254	\$ 51,080
Total Direct Labor		137	\$ 21,761	705	\$ 102	2,447	237	\$	36,578	277	\$ 42,8	79 13	9	\$ 21,504	208	\$ 40,021	81	\$	13,345	17	\$	3,619	1,801	\$ 282,154
Other Direct Costs																								
Travel			\$ 550		\$	950		\$	-		\$ -			S -		\$ 1,200		\$	680		\$	-		\$ 3,380
Mailing			\$ 100		\$	100		\$	100		\$ 1	00		\$ 120		\$ -		\$	-		\$	-		\$ 520
Printing and Binding			\$ 125		\$	442		\$	2,763		\$ 2	51		\$ 3,138		\$ 225		\$	-		\$	-		\$ 6,943
Communication			\$ 200		\$	200		\$	50		\$	50		\$ 50		\$ -		\$	-		\$	=		\$ 550
G&A on Other Direct Costs			\$ 98		\$	169		\$	291		\$	<u>40</u>		\$ 331		\$ 143		\$			\$			<u>\$ 1,071</u>
Total Other Direct Costs			\$ 1,073		\$ 1	1,861		\$	3,204		\$ 4	11		\$ 3,638		\$ 1,568		\$	680		\$	-		\$ 12,464
Total EIR		137	\$ 22,833	705	\$ 104	4,308	237	\$	39,782	277	\$ 43,3	20 13	9	\$ 25,143	208	\$ 41,588	81	\$	14,025	17	\$	3,619	1,801	\$ 294,619

Page 74 of 79

Exhibit B

Table 7-3 Detailed Cost Estimate for the Coastal Access Programmatic Analysis

Key Staff	Rate		t Descriptio tives Analys			strativ EIR	ve Draft	Publ	ic Dra	ft EIR	Res	s trativ EIR s pons e		F	inal EI	R		lic/ County leetings	F	Iearings		CEQ	A Finc	lings		Total
	(\$/hr)	Hours	Cost	Но	lours	(Cost	Hours		Cost	Hours	(Cost	Hours	C	Cost	Hours	Cost	Hours	Co	st	Hours	(Cost	Hours	Cost
<u>Direct Labor</u>																										
A. Project Description																										
John Peirson	\$220.00	8	\$ 1,76	60	0	\$	-	2	\$	440	2	\$	440	0	\$	-	0	\$ -	0	\$	-	0	\$	-	12	\$ 2,640
Greg Chittick	\$180.00	<u>16</u>	\$ 2,88	<u>so</u>	<u>0</u>	\$	-	<u>4</u>	\$	720	<u>4</u>	\$	720	<u>0</u>	\$		0	\$ -	0	\$		0	\$		<u>24</u>	<u>\$ 4,320</u>
Total Issue Area		24	\$ 4,64	0	0	\$	-	6	\$	1,160	6	\$	1,160	0	\$	-	0	\$ -	0	\$	-	0	\$	-	36	\$ 6,960
B. Aesthetics																										
Michael Cassata	\$150.00	<u>4</u>	\$ 60	0 _	<u>12</u>	\$	1,800	<u>2</u>	\$	300	<u>4</u>	\$	<u>600</u>	<u>0</u>	\$		0	\$ -	0	\$		0	\$		<u>22</u>	\$ 3,300
Total Issue Area		4	\$ 60	0 1	12	\$	1,800	2	\$	300	4	\$	600	0	\$	-	0	\$ -	0	\$	-	0	\$	-	22	\$ 3,300
C. Air Quality/Greenhouse Gases																										
Greg Chittick	\$180.00	0	\$ -		16	\$	2,880	4	\$	720	4	\$	720	4	\$	720	0	\$ -	0	\$	-	0	\$	-	28	\$ 5,040
Steve Radis	\$200.00	<u>0</u>	\$ -	_	0	\$	-	<u>0</u>	\$	<u>-</u>	0	\$	-	<u>0</u>	\$		0	\$ -	0	\$		0	\$		<u>0</u>	\$ -
Total Issue Area		0	\$ -	1	16	\$	2,880	4	\$	720	4	\$	720	4	\$	720	0	\$ -	0	\$	-	0	\$	-	28	\$ 5,040
D. Biological Resources																										
Jon Claxton	\$139.70	10	\$ 1,39	7 2	22	\$	3,073	4	\$	559	0	\$	-	4	\$	559	0	\$ -	0	\$	-	0	\$	-	40	\$ 5,588
Travis Belt	\$127.60	0	\$ -		30	\$	3,828	4	\$	510	0	\$	-	0	\$	-	0	\$ -	0	\$	-	0	\$	-	34	\$ 4,338
Jaimie Jones	\$102.30	0	\$ -		0	\$	-	0	\$	-	0	\$	-	0	\$	-	0	\$ -	0	\$	-	0	\$	-	0	\$ -
Adriana Neal	\$115.50	<u>0</u>	\$	_	<u>0</u>	\$		<u>0</u>	<u>\$</u>		<u>0</u>	<u>\$</u>		<u>0</u>	<u>\$</u>		<u>0</u>	\$ -	<u>0</u>	\$		<u>0</u>	\$		<u>0</u>	\$
Total Issue Area		10	\$ 1,39	7 5	52	\$	6,901	8	\$	1,069	0	\$	-	4	\$	559	0	\$ -	0	\$	-	0	\$	-	74	\$ 9,926
E. Cultural Resources																										
Shawna Scott	\$139.70	2	\$ 27	9	4	\$	559	2	\$	279	2	\$	279	2	\$	279	0	\$ -	0	\$	-	0	\$	-	12	\$ 1,676
Leroy Laurie	\$91.30	4	\$ 36	5 2	24	\$	2,191	2	\$	183	4	\$	365	2	\$	183	0	\$ -	0	\$	-	0	\$	-	36	\$ 3,287
Adriana Neal	\$115.50	<u>0</u>	\$ -	_	2	\$	231	<u>0</u>	\$		<u>0</u>	\$		<u>0</u>	\$		<u>0</u>	<u>\$</u> -	0	\$		<u>0</u>	\$		<u>2</u>	\$ 231
Total Issue Area		6	\$ 64	5 3	30	\$	2,981	4	\$	462	6	\$	645	4	\$	462	0	\$ -	0	\$	-	0	\$	-	50	\$ 5,194
F. Geological Resources																										
Perry Russell	\$148.50	4	\$ 59	4	16	\$	2,376	4	\$	594	4	\$	594	2	\$	297	0	\$ -	0	\$	-	0	\$	-	30	\$ 4,455
Cay Fitzgerald	\$99.00	0	\$ -		0	\$	-	0	\$	-	6	\$	594	0	\$	-	0	\$ -	0	\$	-	0	\$	-	6	\$ 594
Courtney Kestler	\$99.00	<u>0</u>	\$ -		<u>0</u>	<u>\$</u>	<u>-</u>	<u>0</u>	<u>\$</u>	<u> </u>	<u>2</u>	\$	<u> 198</u>	<u>1</u>	<u>\$</u>	99	<u>0</u>	\$ -	0	\$		<u>0</u>	\$		<u>3</u>	<u>\$ 297</u>
Total Issue Area		4	\$ 59	4 1	16	\$	2,376	4	\$	594	12	\$	1,386	3	\$	396	0	\$ -	0	\$	_	0	\$	-	39	\$ 5,346

Page 76 of 79

Page 77 of 79

Table 7-3 Detailed Cost Estimate for the Coastal Access Programmatic Analysis (con't)

Key Staff	Rate	_	t Descrip tives Ana		Adminis	strati EIR	ve Draft	Publ	ic Dra	aft EIR	Res	s trat EIR s pons omme	e to	Fi	inal F	EIR		ic/ County leetings]	Hearii	ngs	CEQ	A Fine	lings		Total
	(\$/hr)	Hours	Cos	t	Hours	(Cost	Hours		Cost	Hours		Cost	Hours		Cost	Hours	Cost	Hours	3	Cost	Hours	(Cost	Hours	Cost
G. Land Use and Recreation																										
Shawna Scott	\$139.70	2		279	2	\$	279	2	\$	279	2	\$	279	1	\$	140	0	\$ -	0	\$	-	0	\$	-	9	\$ 1,257
Emily Creel	\$102.30	<u>6</u>	\$	614	<u>24</u>	\$	<u>2,455</u>	<u>8</u>	<u>\$</u>	818	<u>12</u>	\$	1,228	<u>2</u>	\$	205	<u>0</u>	<u>\$</u> -	_ 0	<u>\$</u>	-	0	<u>\$</u>		<u>52</u>	\$ 5,320
Total Issue Area		8	\$	893	26	\$	2,735	10	\$	1,098	14	\$	1,507	3	\$	344	0	\$ -	0	\$	-	0	\$	-	61	\$ 6,577
H. Transportation and Circulation																										
Greg Chittick	\$180.00	4	<u>\$</u>	<u>720</u>	<u>12</u>	\$	2,160	<u>4</u>	<u>\$</u>	720	<u>4</u>	<u>\$</u>	720	<u>2</u>	<u>\$</u>	360	<u>0</u>	\$ -	0	<u>\$</u>	-	<u>0</u>	<u>\$</u>		<u>26</u>	<u>\$ 4,680</u>
Total Issue Area		4	\$	720	12	\$	2,160	4	\$	720	4	\$	720	2	\$	360	0	\$ -	0	\$	-	0	\$	-	26	\$ 4,680
I. Document Preparation and QA/QC																										
John Peirson	\$220.00	2	s	440	8	\$	1,760	4	\$	880	4	\$	880	4	\$	880	0	\$ -	0	\$	_	0	\$	-	22	\$ 4,840
Bonnie Luke	\$140.00	0	\$	-	8	\$	1,120	8	\$	1,120	8	\$	1,120	4	\$	560	0	\$ -	0	\$	-	0	\$	-	28	\$ 3,920
Brittney Stevens	\$120.00	4	\$	480	<u>16</u>	\$	1,920	<u>16</u>	\$	1,920	<u>16</u>	<u>\$</u>	1,920	<u>24</u>	\$	2,880	<u>0</u>	\$ -	0	\$	-	0	\$		<u>76</u>	\$ 9,120
Total Document Preparation and QA/QC		6	\$	920	32	\$	4,800	28	\$	3,920	28	\$	3,920	32	\$	4,320	0	\$ -	0	\$	-	0	\$	-	126	\$ 17,880
J. Project Management																										
John Peirson	\$220.00	4	\$	880	8	\$	1,760	4	\$	880	4	\$	880	4	\$	880	0	\$ -	0	\$	-	0	\$	-	24	\$ 5,280
Brittney Stevens	\$120.00	<u>0</u>	<u>\$</u>		<u>4</u>	<u>\$</u>	480	<u>4</u>	<u>\$</u>	480	<u>4</u>	<u>\$</u>	480	<u>4</u>	<u>\$</u>	480	<u>0</u>	\$ -	0	\$	-	0	\$		<u>16</u>	\$ 1,920
Total Program Management		4	\$	880	12	\$	2,240	8	\$	1,360	8	\$	1,360	8	\$	1,360	0	\$ -	0	\$	-	0	\$	-	40	\$ 7,200
Total Direct Labor		70	\$ 11.	,289	208	\$	28,873	78	\$	11,403	86	\$	12,018	60	\$	8,521	0	\$ -	0	\$	-	0	\$	-	502	\$ 72,104
Other Direct Costs																										
Travel			\$	120		\$	275		\$	-		\$	_		\$	-		\$ -		\$	_		\$	_		\$ 395
Mailing			S	-		\$	-		\$	_		\$			\$	-		\$ -		\$			\$			\$ -
Printing and Binding			\$	50		\$	_		\$	_		\$	_		\$	-		\$ -		\$			\$			\$ 50
Communication			\$	50		\$	50		\$	_		\$	=		\$	-		\$ -		\$	_		\$			\$ 100
G&A on Other Direct Costs			\$	22		\$	33		\$	-		\$	-		\$	-		\$ -		\$	-		\$	_		\$ 55
Total Other Direct Costs			-	242		\$	358		\$	-		\$	-		\$	-		\$ -	-	\$	-		\$	-		\$ 600
Total EIR		70	\$ 11.	531	208	\$	29,231	78	\$	11,403	86	\$	12,018	60	\$	8,521	0	\$ -	0	\$		0	\$	_	502	\$ 72,703

Page 78 of 79

Page 79 of 79